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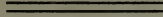
of the

Thirtieth Annual Meeting

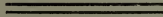
of the

Fire Underwriters Association

of the Pacific



SAN FRANCISCO, CAL., JANUARY 9-10, 1906



Printed by Order of the Association

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REFERENCE BOOK

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Thirtieth Annual Meeting

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THIRTIETH ANNUAL MEETING

FIRE UNDERWRITERS' ASSOCIATION
OF THE PACIFIC

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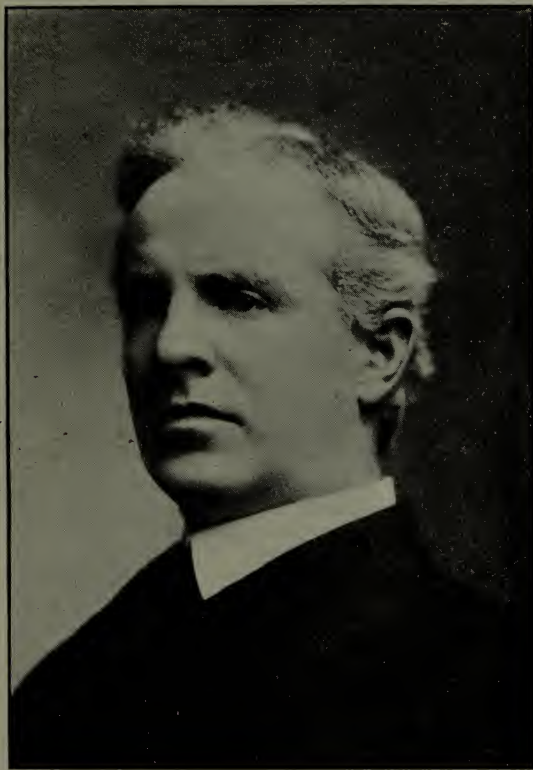
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A. W. THORNTON.

PREFATORY

A few words of explanation are called for in connection with the publication of these proceedings in an abridged form and out of their regular order as to time.

Immediately following the meeting of January 9th and 10th, 1906, President Thornton took up matter of the publication of the proceedings which had so far progressed by the middle of April that the earthquake of the long to be remembered morning of the 18th found the completed volumes ready for delivery in the office of the publishers. No better realization of the sweeping character of the conflagration which immediately followed the earthquake can be had than is derived from the fate of these proceedings. Not only were the bound volumes in the office of the publishers destroyed, but the fire also consumed the copy and successive proofs in the printing establishment, the manuscript in the Secretary's possession in the Association Library, and the original notes of the shorthand report of the meeting in the stenographers' rooms, all at widely separated points.

In the very great confusion of business during the following few months little could be done towards replacement.

To reconstruct the entire record of the 1906 meeting was impossible. It was found, however, that in the January number of the *Pacific Underwriter* there had appeared copies of the papers read at the meeting, and it is to the publishers of that periodical that we are indebted for the appearance of the proceedings in their present shape. The loss of the stenographic report of the discussions following the reading of the papers and of the reports of several of the committees is to be greatly regretted.

As a matter of interest in future years there has been appended a brief description by an eye witness (one of the Past Presidents of this Association) of the conflagration—which during the three days of its duration devastated 514 city blocks covering 2,630 acres and containing 28,000 buildings and cost 600 lives.

PAPERS PRESENTED AT THE
THIRTIETH ANNUAL MEETING
OF THE
FIRE UNDERWRITERS' ASSOCIATION
OF THE PACIFIC

Held in the rooms of the Board of Fire Underwriters, Merchants'
Exchange, San Francisco, on January 9th and 10th, 1906.

President A. W. THORNTON, in the Chair

THE PRESIDENT'S ADDRESS.

A. W. Thornton.

"It doesn't make any difference how much a man has to say, just so he says it in a few words." This suggestion of Artemus Ward will be followed in the presentation of an annual address; there is very little to say and it will be said briefly.

Born of strong and sturdy parentage, carefully nurtured in its infancy, trained and cultured in its youth, this Association has reached a vigorous maturity, and today celebrates its Thirtieth Anniversary with pride in its past accomplishments and pleasure in the anticipated results of its efforts. The establishment of an excellent insurance library—of which you have heard a great deal, though possibly have seen little—has been one of the Association's best works; the Annual Proceedings for the past thirty years contain valuable papers on nearly every phase of fire insurance, and the perusal of these is, in itself, an education in underwriting. But the grandest and best result you have attained is the organization of an Insurance Institute on the Pacific Coast. Two years ago President Palache advocated a school for insurance training, and the recommendation was strongly reiterated by President Fuller last year. Thanks to

these gentlemen, and to the able and untiring efforts of Mr. Herbert Folger and other members of the committee having the matter in charge, the Insurance Institute in San Francisco is now a success far beyond expectations.

It is not the intention to usurp the prerogatives of the committee and dwell at length on the history and workings of the Institute; a report has been prepared covering the matter thoroughly and you will have the pleasure of hearing it at this meeting. Your assistance and co-operation are desired to assure the future success of the undertaking. It is of the utmost importance that insurance interests be placed in the hands of able, intelligent, educated men, thoroughly trained in all technical matters pertaining to the business. Few occupations in life—and none of the colossal magnitude of fire underwriting—are without preparatory schools of some description. It is conceded that to be a successful underwriter one must be versed in the broad principles of hazards, lines, limits, contracts, rates, protection, etc.; and be, as well, somewhat of a lawyer, a book-keeper, a chemist, an architect, an electrician, a machinist, a mathematician, a diplomat, a financier.

“And still they gaze and still the wonder grows
That one small head can carry all he knows.”

In the absence of preparatory schools, or insurance institutes, where has the underwriter of today acquired his knowledge and education in the essentials of the business? Through actual experience and at the expense of the companies he has represented. The doctors, the lawyers, the bankers, the miners, the electricians are fittingly trained and taught for their individual callings; the men of the professions and sciences profit by the researches, studies, writings and teachings of those who have gone before. The insurance men buy their experience and the companies pay for it—and few profit by the experience of others.

Is it not time that the successors in the business be trained to fill their positions creditably and honorably, without any greater expense for their education and experience than is absolutely necessary? And how can this be accomplished in any other manner than through schools or institutes for technical training and instruction?

Before passing from the Insurance Institute and leaving the further discussion thereof to the gentlemen who have taken such an active interest in making it a success, it appears advisable to make a suggestion regarding the appointment of future committees on the work of the Institute. The present member-

ship of the committee is five, of which two are residents of the Northwest, and these two members have been unable to render any active service during the past year; the burden has fallen altogether upon the shoulders of those who reside in California. In future the membership should be composed wholly of gentlemen having their headquarters in San Francisco, that they may have an opportunity of assuming their proportion of the labors in conjunction with the honors.

Last year the Constitution of the Association was amended to allow the admission of Associate Members, and many of the clerks have availed themselves of the opportunity offered and are attendants at today's meeting. A most hearty welcome is extended to these gentlemen, and they are requested to take part in our proceedings, discuss the papers as they are read and freely ask questions. The older heads are never omniscient, while the young thinker frequently advances arguments out of the usual rut and channel, leading to new ideas and new principles.

While the admission of Associate Members has added materially to our numbers, it is brought sadly to our attention that the past year has reduced our ranks by the death of four esteemed and valuable members. The congenial, jolly, jovial Harry C. Boyd went to his eternal reward last July, mourned by everyone who knew him. Roger B. Friend was called away by the Supreme Ruler of the Universe, at a time when his prospects seemed brightest and his ambitions about to be realized by well-merited promotion. C. M. Nichols, a veteran of twenty-five years experience as Inspector and Surveyor in the Board Office, honored and respected by his many friends and business associates and an Honorary Member of the Association, has departed to the land "from whose bourne no traveler returns." W. L. Chalmers passed his allotted "three score years and ten" after an active career as an underwriter and Independent Adjuster on the Coast. He was one of the early Presidents of the Association and of late years an Honorary Member. He died last month in Portland, practically in the harness. Suitable memorials were prepared by committees appointed, but it is fitting at this time to pause in our deliberations and pay tributes of respect to our departed colleagues.

Theoretical papers have been read before this Association on several occasions (and this year you will have an opportunity of listening to another), prepared by Professor A. W. Whitney of the University of California. These articles blaze a new path in fire insurance and reflect honor and credit on the Pacific

Const. True, these purely technical discussions will not assist in securing a larger volume of premiums, or aid in preventing a single fire; they will not enable you to determine the moral or physical hazard of any risk, or facilitate the adjustment of a loss. But, what is of infinitely more value, they show the possibilities of reducing the business of fire underwriting to an approximately exact science; they demonstrate where the actuary may be as indispensable to the fire insurance companies in the future as they now are to the life insurance companies—provided the fire companies keep the proper statistics. Mountains of information and data are kept in your offices, but they have proven comparatively useless; Professor Whitney shows where they are incomplete and insufficient; he points out what is necessary for the future and clearly proves what may be mathematically demonstrated when your records are properly compiled.

Who can read the treatise on the co-insurance clause prepared by this able writer without realizing that its application in the past has been incorrect—that the difference, for example, in the rate for a brick building under fire protection, carrying but ten per cent of insurance as to value, is far too low as compared with the same class of building with insurance equal to ninety per cent of its value? Hitherto the differences in rates for the several percentages of co-insurance have been based on guess work; Professor Whitney shows how the relative rates may be positively and definitely ascertained when the companies have compiled the proper statistical information.

The writer predicts that in the near future the application of the co-insurance clause will become more scientific and more general; that all towns with fire protection will receive reductions for co-insurance in proportion to the efficiency of the protection; and that different risks in the same town will be entitled to reductions for co-insurance proportionate with their probabilities of yielding partial losses. The city with standard fire department and water supply, receiving forty per cent credit therefor in schedule ratings, will secure, say, forty per cent reduction for eighty per cent co-insurance on buildings of standard construction (or such percentages as may be scientifically determined from future figures); the town with inferior protection, worth 20 points, will obtain perhaps 20 per cent difference in ratings for the application of the 80 per cent co-insurance clause on standard buildings. Where no credit is due for protection, the value of co-insurance is reduced to practically zero, and no credit would therefore apply. The variation in credits for different percentages of co-insurance will be susceptible of mathematical demonstration. The fire-proof building

will receive a much greater reduction, when well insured as to value, than the poorly constructed brick, and there will be a differential between the stock of pig-iron and the stock of millinery.

It is claimed at the present time that the difference in the hazard is recognized in the special or tariff ratings, and that therefore the same percentages of reductions on both would give equitable results. If this be so, then why not give equal credits for co-insurance to the country store and to the same class of construction under first class protection? And why not give frame buildings similar reductions to the bricks, or stocks the same credits as buildings? Under such a theory the stock of feathers in a frame building should receive the same allowance for co-insurance as the fire-proof building! This surely is not correct. The sooner companies adopt graded credits for co-insurance proportionate with the "damage hazard" (as Professor Whitney has christened it), the sooner they approach scientific methods in this particular. Tentative schedules could be prepared, based on the judgment of able underwriters, until statistics are sufficiently complete to compute exact differentials.

It is not within the province of this Association to adopt or formulate rules for the government or control of the companies operating on the Pacific Coast; if it were, the recommendation would be made here and now that steps be taken to apply the co-insurance clause in a more scientific manner than is now in vogue.

While dwelling on the matter of education and taking measures to train the young men, do not forget that efforts at education should be exerted in other directions. Turn to the public and teach it to entertain for the business of fire insurance the same high respect and honor that is merited by the banking system. Prove by precept and example that the men engaged in this calling are as able and as competent, as honorable, upright and conscientious in their business transactions, as much entitled to confidence and respect as the bankers, merchants or manufacturers. Vicious attacks are frequently made against fire insurance companies and the men engaged in furnishing indemnity against fire—and these attacks go unchallenged and unanswered. Which of you would tolerate a libelous article against you personally without demanding a retraction? Malicious falsehoods concerning our occupation is a personal reflection; they should be pinned down and refuted, otherwise they will be credited by a majority of those who read them. It is not desirable to rush indiscriminately into print but men detailed for that purpose should have charge of all press matters and see

to it that newspapers publish nothing but the truth concerning fire insurance and that all mis-statements are properly and promptly answered. This is due to ourselves and the companies we represent; it is due to the public that it has a correct conception of the important and indispensable institution of fire insurance.

What can the public be taught? "Animosity towards corporations grows largely out of misapprehension in regard to them." Dissipate this misapprehension. Show that this is a legitimate calling, with millions of dollars invested, conducted with but an ordinary expense ratio as compared with other industries, and yielding a smaller percentage of profit with greater probabilities of loss to the stockholder than almost any other line of business. Demonstrate that losses are adjusted fairly and justly, but that the payment of excessive or dishonest claims raises the rates to honest citizens; "that no combination in any business can possibly be injurious to the public if it furnishes that public the article produced at the lowest price consistent upon a fair return upon the capital invested and proper remuneration for the labor employed;" that it is to the interest of the public that adequate rates be charged for the risks incurred that the indemnity be not impaired; that all losses must eventually be paid by the public; that all expenses attached to the conduct of the business must be included in the rate and paid by the public; that its interest is to reduce expenses and taxation, to use its efforts to secure proper building laws and see that they are enforced; that rating associations and bureaus are beneficial to the policy holder by reducing the cost of inspections and lessening the fire waste, thus lowering rates; that "co-operation in insurance is not a trust," co-operation being necessary for scientific compilation of averages, which is an essential factor in fire insurance; that the company operating in a limited field necessarily offers unstable indemnity; that mutual insurance has uniformly proven a failure; that—but why enumerate further? Thousands of matters for education will present themselves as the occasions arise. The insurance journals are doing good work along these lines, and the Coast Review of this city has been fearless in its denunciations of wild cats and mutual frauds. But insurance journals do not reach the public and must content themselves with educating the men who should in turn educate the people; the people should be reached through the daily papers and these papers required to publish the correct version of any matter in which the insurance interests are involved.

Not long ago a bitter article appeared in a leading daily on the Coast, a prominent property owner complaining that his rate had been raised three times in spite of the fact that he had made numerous and expensive improvements which, he had been informed, would materially reduce his rate. This was followed by several other similar attacks by different people. The writer investigated the matter and found the statement absolutely false—that in fact the rate had been changed but once since the building was erected, and that change was a reduction; and that the “numerous improvements” consisted of a fire-door with a plain glass transom above, which did not warrant any reduction in rate; that the assured’s attention had been frequently drawn to this and he had declined to substitute wire-glass for the plain glass in the transom at a nominal expense. This article and all similar ones should be answered in a prominent and conspicuous manner, giving the public the whole truth and showing the justice and consistency of the position taken by the companies.

What is fire insurance? A system, certainly not a science; a calling, not a profession; an occupation, not a trade. Legally it is but a business and not commerce, according to the decision of the Supreme Court of the United States. The selling of a lottery ticket, the transmission of a telephone message are commerce; but the transaction of millions of dollars of business each year in the United States by fire insurance companies, making it possible for the great industries of the nation to successfully operate, is not commerce. The consequence of this is that an insurance company can transact business in a State other than that in which it is incorporated, merely under sufferance and tolerance. This condition of affairs is not only dangerous and expensive, it is irrational and illogical and must sooner or later terminate. The late disturbances and exposures in the life insurance business have created a demand for Federal supervision and the opportunity should be embraced by the fire companies. In the general scheme of education should be included our United States Senators and Congressmen, who should be shown the evils of State supervision, the national character of fire insurance, and the desirability of the Federal government assuming control of it. What about the Supreme Court decision? This is an era of progression and what thirty years ago might not have been considered by the judges as interstate commerce, may now have reached such proportions as to have become so dignified. It is confidently believed that the decision will be reversed if the proper legislation is passed by Congress.

What benefits may be expected from Federal supervision? It will probably stamp out wild cats and all fraudulent concerns; it will decrease the cost of preparing and compiling forty-five annual statements each materially differing from the other, to be filed in as many States; it will do away with needless and exorbitant taxation; it will give companies the right to transact business in all States and will restore to the companies the rights and privileges, now enjoyed by other corporations, of trying their issues in the Federal Courts, if they so desire. The time may come when a United States Standard policy will be used, the conditions of which would be upheld by the courts generally. An anti-rebate law is within the range of possibilities.

Touching Federal supervision, President Roosevelt said in his message to the present Congress:

"The United States should follow the policy of other Nations by providing adequate national supervision of commercial interests which are clearly national in character. . . . That State supervision has proven inadequate is generally conceded. The burden upon insurance companies, and therefore their policy holders, of conflicting regulations of many States, is unquestioned. . . . The inability of a State to regulate effectively insurance corporations created under the laws of other States and transacting the larger part of their business elsewhere is also clear. As a remedy for this evil of conflicting, ineffective, and yet burdensome regulations, there has been for many years a wide spread demand for Federal supervision. . . . As the insurance business has outgrown in magnitude the possibility of adequate State supervision, the Congress should carefully consider whether any further legislation can be had."

It was formerly the duty of a committee to report to this Association on legislative matters, but this system has been abandoned. It may not be amiss at this time to refer to some of the laws now on our statute books and suggest means for their repeal or amendment.

Search the laws of the country for any statute permitting the robbery of a bank or express company, and your efforts will be in vain. But bills have been passed in several States in conflict with the underlying principle of indemnity, and legalizing theft from insurance companies, by giving the right to a property owner to collect more than the value of his property, more than his loss, in case of fire. The so-called "valued policy" laws throw the cloak of legality around this method of larceny. These laws generally make the amount of insurance on a build-

ing CONCLUSIVE evidence of its value in case of its total destruction, leaving the company no opportunity to prove the contrary. The act would be less vicious if the word "conclusive" were omitted, or amended to read "prima facie," as the insurer would then be permitted to show by preponderance of evidence the proper valuations, although the burden would then be on the company in conflict with the policy conditions requiring the assured to prove his loss. These same legal measures carry with them in some States permission for the insurer to replace or repair, provided notice of such intention is given within twenty days from notice of loss, and provided further that actual work be commenced on such rebuilding within ten days thereafter, the company being obliged to pay a reasonable rental of the premises from the date of fire until completion of the new building. It will thus be seen that the insurer must elect to rebuild within twenty days after notice, even though the assured has made no claim and has failed or refused to furnish plans and specifications or give any information whatever concerning the burned property. The law is not sufficiently plain to warrant the assertion that these obnoxious conditions apply to total losses only; it is quite possible that the election to repair a damage loss should legally be made in twenty days from notice.

It is apparent that the insurer must take action to protect his interests forty days before the assured is obliged by his policy conditions to turn his hand. The writer has discussed this particular law with several Senators and Representatives and feels confident that its repeal or amendment could be easily brought about by a proper explanation at the right time.

The above instance is but one of many. Insurance companies do not ask for legislation, but when bills are passed which curtail their inherent or contract rights or tend to increase losses or expenses (and thereby increase rates), it is a duty incumbent upon them to seek by all honorable means the repeal or revision of the laws which injure alike the insured and the insurer. The great majority of our law-makers are honest, honorable men, who would not knowingly vote for unjust, vicious legislation, but frequently favor the passage of measures without a proper realization of their effect or operation.

The remedy lies in the appointment or selection of men whose duty shall be the explanation to our legislators of the present insurance laws, asking for repeals or amendments as the cases require. If the men so chosen are from the ranks of the

special agents, they will have an opportunity to interview the Senators and Representatives at their home towns prior to the session of the Legislature, at a time when an attentive hearing may be had and the injustice and inconsistency of the statutes or proposed bills be discussed. If it is within the jurisdiction of this body, it is recommended that action be taken to delegate members who shall have charge of these matters, co-operating with or subordinate to the committee on legislation.

Not all the vicious and antagonistic law is to be found in the statutes. Decisions of Supreme Courts are frequently rendered clearly in conflict with the conditions of the contract which the laws of the State of New York oblige the companies to use in that State. These decisions are too often the results of incomplete, improper, incompetent arguments made by attorneys, unlearned in insurance law. An agent recommends a relative or friend as the company's counsellor in unavoidable litigation; the amount involved is small, the issues clear, the defense perfect; the company follows the recommendation. The case is lost through incompetency and a precedent is established that may influence the most important cases in the future. Therefore, employ the best legal talent, be the issues large or small, that decisions may be had on the merits of the cases tried.

When populistic courts render populistic decisions, it is only a question of time when the personnel of the bench will change—when the judges will show a tendency to return to correct principles and seek opportunities to reverse illogical decisions. A good attorney will watch the conditions and judiciously endeavor to secure such reversals.

The Annual Proceedings of our meetings now contain approximately 225 pages; the volume has outgrown the garment of its youth and should hereafter appear in an attire worthy of its age and importance. The recommendation is made that in the future the proceedings be fittingly bound in cloth to make a more presentable appearance, and that the Executive Committee advertise for new bids for the printing and cloth binding and award the contract therefor to the lowest and best bidder.

It is a duty that the insurer owes to the insured to frame the contract, which is a unilateral one, so that no ambiguity clouds the intention. The basis of indemnity, the measure of damage should be clearly defined. No action has been taken by the companies generally to prepare a form for manufactured products and a diversity of opinion exists today between companies and between adjusters concerning "market price" or "manufacturer's cost." When a manufacturer inquires from the local agent or from the special agent what will be the basis of settlement in case of loss, he receives an unsatisfactory reply, or is frankly told that the question is not settled amongst the companies themselves. It is not

the intention to argue the merits of either side of the question at this time. It is strongly urged that this Association prepare a clause to be used in the insurance of all manufactured articles in the hands of the manufacturer, definitely and positively fixing the measure of liability; and that when prepared its general adoption by all companies operating on the Coast be brought about if possible. Why leave this matter open longer? It brings about disputes and disagreements in every loss where the question can arise. An adjuster may be obliged to take two different views on two different losses for the same assured if it so happens that different companies are interested.

While touching on recommendations to facilitate adjustments of losses it is scarcely necessary to advise the organization of a wrecking company in the West to handle damaged stocks where claims are exorbitant, agreements impossible or awards of appraisers excessive. The formation or incorporation of such a company would in itself be a profitable venture, while the saving in losses would be enormous, both in the actual handling of stocks and the moral effect on claimants. If this Association can be instrumental in bringing about the organization of such a company it will be a practical accomplishment of which it may indeed be proud.

Success to the Fire Underwriters' Association of the Pacific, its protege, the Insurance Institute, and to all measures of progress, improvement or advancement it may undertake!

INSPECTIONS.

Lee McKenzie.

I do not know if this paper should be entitled "Inspections" because it is not confined strictly to inspection work, but for lack of a better name will let it go.

Inspection work covers a very broad field and one of the objects is to discover that about the risk which is likely to cause a fire then set about to impress upon the owner of the property the necessity for removing the causes or at least eliminating, as far as possible, the chances of fire from such causes, and I believe it to be the duty of an inspector to prevent losses if he can, or, failing in that, to minimize them.

With the enormous fire waste throughout the country and the millions of dollars paid out annually for losses the necessity for rigid inspection is apparent, for some causes of fire can be removed and others can be so safe guarded as to reduce the chances to a minimum.

Arrangement, protection and care of property can be bettered and there is no apparent reason why it should not be.

As said before the object of inspection is to prevent fires, therefore it is the duty of every inspector, every special agent and every surveyor to teach the property owner how to take care of his property from our point of view;—try to minimize the hazard and try, if possible, to get rid of the things which we know cause fires.

Complete inspection, however, covers a very large field; it not only includes the points mentioned but the inspection of the city—its government, its laws in reference to buildings and their protection from exposing buildings, its ordinances regarding cleanliness, care of hazardous commodities, storage and handling of explosives; its fire department and water supply, fire alarm system, past fire record and numerous other points which go to complete the information the insurance companies desire to have in their possession; and further, a report upon whether or not these laws are enforced and if the fire department and water supply are efficient and well maintained.

An elaborate report is not so much desired as a brief statement covering conditions as found; the inspection, however, should not be so brief as to overlook important features. It is the purpose of this paper, therefore, to sketch out as briefly as possible an inspection beginning with the city and ending with the individual risk in that city, and to make a few remarks on standards of construction and protection.

The report of the inspector would or should include about the following: Name of city, location, population, whether or not incorporated, distance from coast line, atmospheric conditions, prevailing winds, condition of streets and alleys in business and outlying districts and average width of same, conflagration hazard (if any), general condition of buildings and average height, percentage of brick buildings as to frame in mercantile district, if the city appears prosperous, whether or not heavy values are concentrated in a small district, police system, and other points that might present themselves to the inspector.

Fire Department: If it is organized and whether paid or volunteer, and how many members. Number, make, class and condition of fire engines, hose wagons and carts, hook and ladder trucks, chemical engines, combinations; number of feet of hose and condition of same, and all other apparatus that may be in the department; whether or not the different pieces of apparatus drawn by horses are provided with swinging harness and properly manned; whether or not it is housed in such locations as will give the quickest service in case of fire; whether or not the houses and horses are in good condition, and if the men are drilled; in fact every thing that goes to make for prompt action and efficient service, for the fire once started dont wait, it keeps moving.

Water Supply: It is hardly the duty of an inspector to plan a water system, but rather to investigate what the city has provided and to report upon what he finds. In any event, however, the water supply and the arrangement of the system of distribution should always be so planned as to meet any demand made upon it both for domestic and fire purposes.

The source of supply should be noted. If a direct pressure system report the make, style, condition and capacity of the pumps, and if controlled by governor; how pumps are housed and if subject to damage or destruction by fire from exposures; if pump house is connected electrically with city.

If gravity system, what is construction of reservoir, capacity of same and elevation above main business streets of city. (Pounds pressure at the hydrant may be found by multiplying the feet head by .434—80 pounds pressure at the hydrant being taken as a standard); what the distance is from pump house or reservoir to the city. Reservoir should have sufficient capacity to hold several days' domestic consumption and a sufficient reserve in addition for fire purposes.

Make a note of fact if water is delivered to city through

single or duplicate mains giving size of same, and if the distribution system is circulating or if numerous dead ends exist; if the size of the pipes are adequate to meet the demands, and if the proper valves are provided so that in case of break in any of the mains the least possible portion of the system will be cut off for repairs; if all hydrants have at least six-inch inlets and are located on not less than eight-inch mains in business portion (ten and twelve-inch preferred), and six-inch in residence district; if each branch line to hydrant is provided with cut-off gate for repairs to hydrant, and if hydrants have attention (i. e. blown off) at stated intervals and kept in good condition.

It is often claimed by a city, and with much show of pride, that the pressure is so many pounds per square inch—say 100,—but pressure alone does not put out the fire, it is volume of water as well that is needed; therefore some idea as to the number of fire streams, based upon population, would not be out of place.

There being some difference of opinion between engineers and underwriters on this point we will simply present what two eminent engineers, Mr. J. R. Freeman and Mr. J. Herbert Shedd, give as a rough guide to follow:—

Population	No. 250-Gal. Streams.	Population.	No. 200-Gal. Streams.
1,000	2 to 3	5,000	5
5,000	4 to 8	10,000	7
10,000	6 to 12	20,000	10
20,000	8 to 15	40,000	14
40,000	12 to 18	60,000	17
60,000	15 to 22	100,000	22
100,000	20 to 30	180,000	30
200,000	30 to 50		

Having inspected and reported upon the city, its laws in reference to building, etc., its fire department and water supply, we have still to present a few individual risks. We will take then for example a saw mill, dry kiln, flour mill and a standard brick mercantile building for wholesale or manufacturing purposes.

Saw Mill: Should be entirely open construction and a heavy rigid frame capable of withstanding the wear and tear of the operation of heavy driving machinery and the handling of heavy logs. Too much vibration soon puts the shafting out of plumb and hot boxes are apt to follow; floors should be double and at least three inches in thickness and as free as possible from openings; roof of metal or of some approved roofing material. Before any machinery is set or wires strung for lighting, the entire wood work should be thoroughly whitewashed. Metal adjustable bearings only should be used and each provided

with hard oil grease cups or approved oil drip cups; steam pipes should not be closer than two inches from wood work and covered with asbestos cement. Under no circumstances should steam pipes be enclosed in boxes containing sawdust or be covered with felt, matted hair or vegetable fibre, as is sometimes used; all machinery should be free from crowding and easily accessible; all machinery making refuse should be provided with refuse conveyors or blowers; filing room should be cut off from the wood working part of the mill, especially so if the filing room is on a deck floor above a band saw; brazing furnace—if in mill—should be well protected with brick or metal; no enclosed closets or cupboards; metal pans for oil cans and approved metal receptacles for oily waste provided. Supply of oil should be kept in oil house located well away from mill, and only a day's supply permitted in the mill building.

If open refuse fire, it should be at least 300 feet from the mill, with wind-break provided, and so located that the prevailing winds will carry sparks away from mill building. If refuse burner is provided it should be built on solid ground and at least 50 feet from mill building, and rise not less than 20 feet above highest point of mill roof, and be of sufficient size and capacity to consume all refuse without crowding; grate bars ought to be at least four feet from ground; spark arrester should, of course, be provided. The conveyor carrying the refuse to the burner should be metal with open return chain for at least ten feet next to burner.

The boilers and engines should be housed in a brick building, built on solid ground with cement or earth floor; a brick wall should divide the engines from the boilers, and openings, if any, in this division wall provided with fire doors; no openings to be in the boiler room wall toward the mill; all conveyors inside the boiler room to be metal with open return chain and the refuse fed to the furnace automatically and while the chain is traveling from the mill.

Boilers should be well enclosed in brick walls, independent of walls of boiler house, with at least three feet open space around sides and back end of boiler and to be well supported by iron buckstays; boilers to be suspended with steel "I" beams resting on brick piers built from the wall.

Boiler stack should be brick or metal and rising not less than thirty feet higher than roof of mill; if brick, it should be independent of boiler house wall; if metal, and rising through the roof, it should be jacketed and have six-inch air space and hooded just outside of roof.

If shavings or sawdust vault is provided it should be built of brick with brick arched or metal roof, and not closer than ten feet to fronts of boilers; openings into vault provided with

sliding fire doors; bottom of vault about twelve inches higher than boiler room floor, and vault protected by sprinkler heads or steam jets with valve in pipe outside and easily accessible.

Dry Kiln: Should be built of brick concrete or six-inch solid wood walls, with the same kind of wall separating compartments; roof to be 2 in. by 6 in. solid, laid edgewise, then covered with approved roofing material, no wood floors; to be heated by steam pipes; all pipes to be not less than two inches from wood work; vents, if any, to be of galvanized iron and provided with dampers; loading and receiving sheds, if any, to be covered with metal or approved roofing material; kiln to be protected by sprinkler system or perforated water pipes and two 1 1-2-inch steam jets; there should be an additional line of sprinklers or perforated pipes below and between tracks; steam jets should be placed at the ceiling with 1 1-2-inch elbow at end of line and turned down, and arranged so that moist steam only may be introduced.

Protection: If pump and tank are relied upon for protection, the pump should be of the approved underwriters pattern, and of a capacity of not less than 500 gallons per minute, and the tank should not be less than 50,000 gallons capacity, and with an elevation sufficient to furnish at least sixty pounds pressure at the hydrant. A 500-gal. a minute pump should have an eight-inch suction and a six-inch discharge with a three-inch steam feed pipe. The mains throughout the premises should be in proportion to the diameter of the discharge of the pump, and be circulating in distribution; these water mains can then be tapped at any desirable point for outside and inside hydrants; outside hydrants should have three-inch risers with 2½-inch outlets—inside hydrants 2½-inch risers with 2-inch outlets, and each hydrant provided with sufficient hose of an approved make to comfortably meet the demands. Numerous hydrants with short lines of hose are better than a few hydrants with long lines of hose; it is better for the protection and cheaper for the owner.

Dry Kiln: Should be built of brick concrete or six-inch solid more than four stories in height, exclusive of basement and Texas; should have brick walls of required thickness, the walls to be ledged or buttressed for support of joists or floor timbers; frame work to be on the mill construction idea with no concealed spaces or sheathing; the interior wood work to be thoroughly whitewashed or painted with fire proof paint; floors to be double and not less than three inches in thickness. Roof to be of metal or approved roofing material; roof timbers to be in conformity with construction of floors. Stairway and elevator openings through floors to be provided with proper traps made and placed in accordance with National Board requirements.

If the building is exposed, all outside openings toward the exposures should be provided with fire doors and shutters made and hung in accordance with the rules and requirements governing. Machinery should not be crowded; all close conveyors should have release valve over the discharge spouts; elevator heads to be hoppers; mill provided with patent dust collectors.

Care should be taken to see that the mill building and machinery are clean, and particular attention paid to such machinery and appliances as cleaning machinery, corn sheller or corn cracker, feed mill, oat chopper or appliances for manufacturing rolled oats, flakes or hominy.

I would state here that only the flour mill machinery should be in the mill building, and that all cleaning machinery and appliances as just mentioned, should be set up in a separate building.

A set of magnets should be placed at the head of the wheat cleaners to catch up particles of iron, such as nails, broken treshers teeth, etc., that sometimes get into the bags during harvest.

A washer and dryer in a flour mill is a device for washing and drying the wheat before it goes into the bins or is milled; it not only makes the wheat cleaner and the flour better but takes the place of scouring and smutting machines.

The washing and drying machinery should be placed in an independent brick room or tower, for, in connection with the dryer, we have the steam pipe hazard. The process consists of a water bath; the wheat is then carried by elevators to the top of the dryer. It runs through slowly and is subjected to a temperature of from 160 degrees to 200 degrees. The heat is obtained from the usual steam pipe coil and fan. There are different styles of dryers but the one most in use in the Northwest is made of two galvanized iron cylinders, one within the other, and with about an inch and a half space between. These cylinders are about two and one-half to three feet in diameter, and perforated and set vertical. A header is placed about one-quarter to one-third of the way from the bottom. The hot air is introduced at the top of the dryer and is forced through the wheat through the perforations in the cylinders. Below this header, is an open space where cold air is introduced in order to cool the wheat before it is finally put into bins. There is an automatic device which regulates the supply and discharge of the wheat to and from the dryer. Proper vents are provided to carry off the steam and heated atmosphere of the room.

If steam power is used the boilers should be housed in separate brick building with the usual care as to settings, etc.; the stack to be protected where passing through roof and carried to a point well above highest point of roof of mill. Lighting to be

incandescent electric, and the installation in accordance with National Code Rules. Watchman and watch-clock service provided; safety cans for refuse and oily waste. The protection to be along the lines prescribed above for saw mill, with barrels of water and buckets, chemical extinguishers, stand pipes and hose, etc.

Standard Mercantile Building: Should not be over four stories in height nor more than 5,000 sq. ft. floor area; walls to be twelve inches for the top story and increasing four inches in thickness for each story below to the ground, the increased thickness at each floor to be used for beam ledges; the walls to extend thirty-six inches above roof in parapet and coped; cornices, if any, of incombustible material; height over all, say, about fifty-five feet. Posts and girders to be not less than twelve inches thick; floors to be double, the first to be three-inch splined and driven tight, then a layer of some fire resisting material, then a layer of water-proof paper—on top of this should be placed the finish floor of 1 ¼-inch tongue and groove material; around each post, as well as along the walls at the floor level, to be flashed with tin. The floors should be slightly inclined toward a given point and a drain provided to carry off water. All woodwork to be thoroughly painted or whitewashed.

Elevators or stairways to be enclosed in brick shafts with fire doors on inclined tracks and with fusible link attachments at each opening. The dumb waiter shaft to be made of some non-combustible material such as hollow tile; the shaft to be closed at both bottom and top; openings to be protected by fire doors set in channel iron guides with counter balance weight—the door to be slightly heavier than the counter weight,—this arrangement in order to keep the doors closed; all door and window openings on exposed sides protected with fire doors and shutters or wire glass in metal frames. To be provided with outside fire escape and stand pipe—the stand pipe not less than four inches in diameter with siamese coupling at bottom;—to have inside stand pipe of 2½ inches in diameter with two-inch hose connection at each floor and basement, and provided with reel and sufficient two-inch hose of standard make so as to comfortably reach all parts of floor area. Approved auxiliary fire alarms, chemical extinguishers, and watchman and watch-clock service to be maintained.

It was the intention of the writer to point out some of the usual defects which go to cause fires or add to the rapid spread of the fire after it occurs, but the time was so limited that I will simply relate a few of my experiences which go to show how well informed (?) some property owners are regarding construction and the care of property, etc.

A four-story brick building was to be constructed—the south

wall of which was a party wall;—the owner submitted plans and amongst other things the party wall was shown to be four inches less in thickness than an independent wall would be. When attention was called to this the owner replied that party walls were always four inches less in thickness than independent walls for the reason that the timbers in the buildings were supports for the wall and made it more rigid and substantial. Needless to say the wall was finally built correctly by order of the city authorities.

In another case a party wall had been pierced to make communication between two buildings on the fourth floor—the sides had not been properly faced up—and an attempt had been made to put in a steel roller shutter inside the opening, the channel iron guides when placed did not fit, and had been backed up by wooden strips to make it perpendicular so the shutter would work smoothly; through these wooden strips had been bored holes for electric light wires to pass from one building to the other; the threshold was of wood and between it and the brick work below were several inches open space. After the rates were materially raised the entire affair was removed and the proper fire doors installed.

At one time I visited a mill plant and not finding any one in the office I started through the premises in the hope of meeting the owner or some one in authority; I met somebody but did not get a chance to say why I was there—I was kicked out before I could explain—afterward I found out the “somebody” I had met was the owner; we are pretty good friends now.

On another occasion it was noted that during the holidays a merchant had decorated his store and windows with electric lights, tinsel paper, cotton and other inflammable material and had produced a very attractive effect; he had wired the window with flexible cord, with the lights mixed up with the cotton and in the Christmas tree, etc. His attention was called to the danger of such decorations; his reply was that he knew his business and for us to mind ours. Before it was time to raise the rate or notify the companies the window was burned out and considerable smoke damage was paid for by the companies.

The instances related above only show that an inspector or surveyor whenever he enters a risk for inspection, must always keep his eyes open and always be looking both ways for Sunday or he will certainly miss something.

Thank you, gentlemen.

**RATING SCHEDULES SHOULD BE PUBLISHED TO AGENTS,
AND ITEMS MAKING UP RATES SHOULD BE ATTACH-
ED TO POLICIES COVERING SPECIAL HAZARDS AND
BUSINESS RISKS.**

Wm. J. Landers.

It is clear to thoughtful Underwriters and Executive officers generally that much of the adverse legislation of recent years has been actively promoted by Agents, with more than a fair sprinkling of support from property owners to say nothing of the ordinary position of those who follow politics for glory or profit.

Nearly all of the legislation relating to Resident Agents, now enforced in forty-eight States and Territories, as well as many of the Agency license requirements, fire department and other taxes have been promoted by Agents, many of whom are members of Legislatures, and hold to the belief that charges coming against any one Company are small and easily collected. This triangular position of Companies, Agents and people buying insurance, is strange as well as complex. Why should Agent and principal be opposed, and why should the Agent join with the consumer, so to speak, in attacking the source which remunerates the one and protects the other? Aside from the Agent seeking to protect himself by laws directed against his principal is the fact that the property owner is naturally interested in getting insurance as cheaply as possible.

We have Anti-Compact laws spreading in every direction, and we have Mutual Insurance Companies in one form or another, all directly lessening the stability of the ordinary Fire Insurance Company, and consequently injuring the value of their Policies. It is true, too, that in former years the position of an Agent promoting legislation against his Company was unheard of; also, there were no Mutual Companies outside of what might be termed Neighborhood Dwelling or Farm Associations, and Legislatures were rarely, if ever, appealed to by the property owner.

It would not be lacking in interest for a political economist to compare the number and variety of laws pertaining to Fire Insurance as between now and, say thirty years ago, and the same source might be looked to for the examination of laws palpably ill-founded, and which should in the interest of the Policy-holder alone be repealed, and as to taxes, these would be levied against the insured and the uninsured, as well as fall upon land without improvements. It is a claim often heard that in the end the Policy-holder bears the burden of taxes levied upon the business of fire insurance, and just as often is it said that the net profits of Companies over a long period of years have been

so small as to have resulted in the passing away of more Companies than have been replaced by new corporations. Gradually the business is centering with the larger Companies, and with mutual Companies such as obtain in the manufacturing centers of the country.

The so-called triangular position should be destroyed by co-operation between Companies, Agents and Policy-holders, and the main object of this paper is to raise the question whether the Companies have done all that is possible in the direction of promoting the confidence of their thousands of Agents and millions of Policy-holders.

Take, for example, the various Compact and Stamping Offices, Boards of Underwriters and Associations engaged in creating and applying the various Rating Schedules. Of late years it is claimed toward Agents and property owners that every building of importance, occupied for manufacturing or business purposes, is especially rated according to one schedule or another, and also that the business of fire insurance has at last been brought to the point where rates are scientifically calculated and applied. Also, that the effect of applying Schedules is to even the cost of fire insurance, taking each city or town according to its construction and appliances for dealing with fires, and taking each building according to its construction, and dealing item by item with deficiencies and pointing out the advantage of eliminating the same, with the resulting fixed benefit in the rate. This is about the position held by Companies toward Agents and Policy-holders in the comparatively small percentage of cases where persistent inquiry is made.

It has cost the Companies millions of dollars to produce millions of ratings under one or more of the now well-known Schedules, and, assuming that a city or town has been classed or given a basis rate under the prevailing Schedule, the main point of this Paper is reached, viz: That a duplicate copy of the rating of each building should be attached to (but perhaps not referred to) the Policy or Policies covering thereon (the plan should not for the present be applied to Policies covering contents of business buildings). The Agent to whom the Policy is credited should also have a copy of the rating.

The advantage of the Agent being placed in a position to check the risk with the rating in connection with the Policy is obvious, and well calculated to furnish the basis of co-operation between Company, Agent and owner; the latter appreciates, as a general rule, the pointing out of the various items making up his rate, and the opportunity is afforded of bettering the risk to his own and the Company's advantage; also of correcting any violations of city ordinances in respect to which the rating furnishes a penalty, and all in all the items of cost having been

gone over leaves the owner in a state of friendliness as compared with the position of delivering a Policy and merely stating that the premium is so much, the Agent adding that he has no control over the making of the rate—does not know how it is made up—the owner often saying that he does not know whether he will take the Policy or not until he ascertains whether he can get the insurance for less money.

We hear a great deal of the fire waste in this country, and the possibility of reducing it; here is a way of getting at the question, and results would come quickly. Assuming that many Underwriters have objections to the plan, mostly upon the score of expense, why not try it in some one city where there is a compact or Board Office, and where the necessary rate duplications can be made and promptly delivered upon application of Companies or Agents?

It is to be observed that Legislatures are by no means unlikely to enact laws compelling Companies to attach particulars of the rating to Policies, the same as is now voluntarily done by Life Insurance Companies in respect to Applications, and it was only in the last session of the Tennessee Legislature that a Senator introduced a Bill, the title of which read: "An Act—To require all persons, firms or corporations engaged in the business of insurance to attach to the face of every policy of every insurance issued on property within this State, a detailed statement or itemized schedule of the rate charged, showing the basis rate, and each additional deficiency, risk or hazard and the rate charged therefor, which make up the rate charged, and providing that such persons, firms or corporations failing to attach same, shall forfeit to the assured a sum equal to the amount of premium charged in such Policy."

The editor of the leading Insurance Journal, in quoting the caption, as well as the three sections of the Bill, stated that if such a law were enacted it would increase the expense of doing business in Tennessee, and that a charge should be made therefor and shown in the itemized Schedule.

Companies know that in dealing with Agents there are, so to speak, Agents and Agents; many Agents are anxious to in every way improve the business and extend their relations with property owners. Many other Agents care nothing about the business, simply looking to the often accidental getting hold of a risk, and thereafter only to the delivery of policy and collection of commission. The former class includes those who claim that Companies employ too many Agents and that there is no longer any pleasure and not much profit in representing an Insurance Company; they also often complain of the difficulty experienced in getting hold of information regarding the items making up the rate of a risk, and in many sections the informa-

tion is refused. Property owners are often similarly treated, and it will be observed that Compact and Stamping Offices generally are what may be called irresponsible quantities in the business, taking no interest, and not caring whether the insurance is taken out or not. These remarks apply more especially to the employees of such Offices, since all over the country there is a considerable number of earnest and painstaking Managers, who, to the extent of their time, are entirely willing to explain the items making up a rate to either Agent or owner; so, coming back to the question of co-operation, here is an important opportunity to advance along the lines of friendliness and the dissemination of information, which cannot be too closely applied in the best interests of the business.

The position that an Agent should occupy, but which the Company scarcely permits from the point of view expressed in this Paper, was aptly set forth in August of last year by a well-known Underwriter as follows: "The sense of personal responsibility, pride of representation, and especially the active oversight of the Company's interest, which has made so large a proportion of our Agencies not only a pleasure to the Official and Special, but a principal source of profit to the Company, a condition in the fire insurance business which in past years has made it stand out among other businesses almost unique, and certainly attractive and beneficial, are in danger of being reduced, even lost, etc., etc."

This expression would aptly apply to the business of forty or fifty years ago; in later years, however, the position seems to have degenerated, until the agent goes it alone, so to speak, a condition of affairs which can be modified and improved by the general adoption of the suggestions herein made.

MANNERS AND MANNERISMS.

(An Address.)

Wm. A. Sexton.

It would be presumption on my part to enter into a lengthy dissertation on the theory of underwriting; nor should it be mine to demonstrate how fire insurance can be benefited by the introduction of quadratic equations, or the rule of three; but the privilege of addressing you having been accorded me, I will devote such time as is at my disposal, to a modest discussion of the manner and the method of securing business.

The Pacific Slope is a field apart, peculiar with its own fire history, and affording us a school of underwriting, in a measure, independent of the Middle and Eastern sections. In other fields, more thickly populated, the selection and inspection of risks is a vastly more important factor than conditions will warrant on this Coast. An extended territory, with its consequent heavy expense, and a comparatively light population, with a proportionately less insurable value, requires of us that we keep up a constant quest after business, and "scientific inspection" by the field man becomes of secondary importance. By this I would not have you believe that I seek to depreciate the value of inspection, for I only desire to set forth the relative importance of solicitation and inspection as apparent in this field; and, in contradistinction to our Eastern brethren, the securing of business, of necessity, is the more important factor. I would prefer not to make this statement, but it is the confronting condition that we are dealing with, and not a theory.

There is a certain pleasure about writing new business that will keep a field man up into the wee hours of the morning, and make him work under pressure with a decided enjoyment. This we have all experienced, and this same feeling is full brother to the hunter's elation when bagging game. True, some of us, sometimes, bait our trap with an "accommodation line," accepting something from the agent, which, were it not for the prospect of other business to follow, we would not write at all. Confessedly, this is a bad practice, and does not always have the desired effect, for the agent frequently gathers the idea that such is the sort of business the company wants, and sends it along; his higher grade risks going elsewhere. Truly, it is an expensive proposition to write "accommodation lines," and, on

the other hand, it requires all the tact at a field man's disposal to refuse them and still hold the good will of the agent. Some one has defined a diplomat as "one who steals your watch and chain, and then explains it so well that you give him your coat and vest," but a diplomat's path is one of roses compared to the trail which a field man has to travel in refusing a risk, or canceling a policy. Choosing the proper moment, and then giving a prompt, positive and final declaration of the company's position, has proven the most satisfactory method.

The special agent is somewhat like a gardener, the agencies in his field are the plants in his garden, and from day to day, throughout the year, he must take up here and replace there, and always, always cultivate. He must help the agencies to grow, and to do this he must solicit, from the agent, with the agent, and often alone. It has been said that it is derogatory to the position of a special agent for him to solicit, but it is my impression that the derogation is greater if through lack of utility he loses his job.

Often the approach of the agent's "good side" is as formidable as scaling the icy wall of a glacier, and as the field man nerves himself for the attack he feels very much like a forlorn hope. Knowing the agent, getting so you can talk with him as human beings should, giving full value to his ideas, and gradually making him feel that your good and his good are identical, that the relationship is of mutual benefit, are the objects to be attained. There are a great many things which the agent at first sight may take exception to, from the color of your tie, to the supposed size of your head, but as you get to know him better, perhaps his ideas, if they are to your prejudice, will change. If they do not, the only satisfactory course, with the business falling off, is to move.

Right here, apropos of field men and field work, I am going to submit to you a few "DON'TS" in the hope that some of them, if not all, will meet with your approval.

DON'T call the agent by his first name. (There is his last name which you may use, and, I might add, a great many others, which will occur to you.)

DON'T invite the agent to have a drink, especially on your initial visit. (There is always a possibility of his accepting and then you will begin to doubt his reliability.)

DON'T always accept if he asks you first.

DON'T go into the agent's office smoking. (Some agents

possess the idea that smoke should be reserved for the hereafter.)

DON'T smoke in the agent's office, without first offering him a cigar. (However, in some agencies the giving away of a bit cigar is to be considered a sacrilege.)

DON'T talk too much about "My Company" and "My Field." (The agent sometimes knows that you don't own either of them—yet.)

DON'T refer too frequently to the "Loss I just paid." (While this may give you a feeling of affluence, it is a misstatement, and puts the company in the background.)

DON'T speak of the "Salvage I made." (If the salvage existed, you, perhaps, found it, but making a salvage infers that such did not have a prior existence, and when there is no salvage, one cannot be made without some dishonesty.)

DON'T tell your fellow field man how much new business you have just written. (It is likely to sadden him, and, in some cases, he may not believe you.)

DON'T grumble if you are kicked at from both ends, the general agent and the local. (Being a buffer is a part of the consideration for your salary.)

DON'T fail to inquire about the agent's baby. (Using the word "baby" is much safer than specifying sex.)

DON'T "knock" any of your competitors. Seriously, detraction is the poorest and meanest of sins, and constant "knocking" often serves as an advertisement for the "knockee." Again, decrying the other fellow brings our own short-comings into bold relief, and, beyond this, the right has not been given to any of us "to cast the first stone."

In visiting the agency field it becomes more and more apparent to the special agent that he is regarded by the local as a "fountain of wisdom," and many and diverse are the propositions submitted to him, for all of which he is expected to have a satisfactory solution. To convey this knowledge to the agent, and, at the same time, to keep the omnipresent ego in the background, is a task which often requires the most delicate handling. In the multitude of questions which will be asked him, there will be many that would require the wisdom of a Solomon to answer, and, in such cases, a frank avowal of the lack of knowledge will be appreciated by the local.

Many agencies have established the custom of gathering together a collection of hard customers, who never have insured, who never will insure, and who don't believe in insurance, and

when the guileless and unsuspecting field man comes around in his search after new risks, he is promptly taken in tow and put in communication with the village oracles referred to. Certainly he is desirous of exhibiting his prowess in the presence of the agent, and the zeal and energy which he wastes upon this stock of hard ones is surely worthy of better results. Seldom, if ever, in such a case, does he make a convert, and he retires that night, sad in heart, but feeling that the agent, out of pure friendship for him, did his best. The local, more often, however, has a genuine prospect, in working up which he seeks the assistance of the visiting special, believing, justly, that the latter's eloquence will bring good returns. I recall an incident, which occurred in the metropolis of Silver Creek, Siskiyou County, California. The company's agent, at that point, was cashier of the local bank, a young man of considerable ability, and he had just become interested in the fire insurance business, having but recently accepted the appointment. On my first visit he informed me that the minister of the religious denomination to which he belonged had just completed a new dwelling, and he said that he had spoken to the reverend gentleman about insurance without result. He requested that I go with him and show him how to secure this risk, and his confidence in the certainty of my getting it was most simple and childlike. As a result I put in about an hour talking with the possible insurer, or rather at him, for he received me with all the warmth of an iceberg, and positively refused to thaw. When I was about to leave, I thanked him for the courtesy he had extended, and I told him that I thought he had done so on account of the "fraternal" spirit which he knew to exist between us. At the word "fraternal" he came out of his trance condition, and requested an explanation. Accordingly I informed him that I felt he recognized the fact that we were both in the same business, that we both were endeavoring to save people from the effects of fire. I wrote that little risk, you know I had to do it, for I would not have disturbed that agent's faith in me for all the world.

Frequently it happens that the Board of Fire Underwriters, by some peculiar collective mental process, issues a circular or makes a ruling, with which some of us fail to agree. Possibly, but seldom, the Board is in error; frequently the trouble lies in the limited scope of our own grey matter, but right or wrong, whether we like it or not, we should at least sustain the rulings of the Board when in contact with our local agents. It certainly does our own position little good to seek to detract from an in-

situation, when, in the majority of instances, we are well satisfied to protect ourselves by its rulings. True, it is an easy proposition to place the burden of responsibility on the Board (it makes our visit a bit more comfortable while with the agent), but it is not fair; it is not commendable procedure, and, viewed from the standpoint of utility and practicability, it won't pay.

Just one word more, and I am indeed happy to give it utterance. There is a spirit of brotherhood to be found amongst our field men, the like of which exists in no other calling. In my several years of experience I have yet to come in contact with the slightest indication of a mean, unkind or ungentle act. It is grand and exalting to be able to make that statement, and I warm with pleasure when I do so. We meet active competition, aggressive sometimes, but always tempered with fairness, and it is in all truth that I say I am grateful and proud that I am a field man.

Gentlemen, I thank you.

A FEW SUGGESTIONS TO THE WASHINGTON ADJUSTERS

H. T. Granger.

I should certainly be devoid of the courtesies due to the occasion if I did not at the outset express my sincere thanks to the officers of the Fire Underwriters' Association of the Pacific, for the honor done me in inviting me to present this paper.

I am somewhat of an enthusiast on the various subjects which concern and interest the insurance fraternity. It is, however, with a considerable degree of fear and trembling that I "Shy my castor into this ring." I am asked to, and shall undertake to make a few suggestions to the fire insurance adjusters operating in the State of Washington. In doing so I appreciate and realize, that I am addressing a body of men who are concerned with the application of theories to the facts of practice, and that while it is comparatively easy to evolve theories, it is often times exceedingly difficult to put them into practical operation. While I recognize that the members of this Association, or at least many of them, have been engaged in the actual practice of insurance adjustment for many years, while I have been confined largely to the study of the theories of insurance, and that only for a limited number of years, yet I am constrained to make a few suggestions which, whether correct or accepted, may at least, I hope, lead to some discussion and interchange of thought which may result in benefit to the man who is compelled to face the practical facts of a loss.

I wish it borne in mind that whatever I shall say in this paper relates only to the law of insurance as it exists in the State of Washington.

Blackstone, the father of the English common law, defined civil law to be a "rule of conduct." I could thoroughly agree with Justice Blackstone if he had said that the law ought to be a rule of conduct. A rule means something definite, fixed and certain. This was the definition of the word "rule" which Mr. Blackstone unquestionably had in mind when he used it as a synonym of the word "law." The law undoubtedly should be a rule. That is to say, it should be fixed, definite and certain. Men enter into contracts which must be constructed by the law, therefore when men enter into such contracts the law should be a fixed, definite and certain rule so that those who make contracts may know what it is that they agree to do, or what they agree not to do.

After having spent a few years in the study of insurance law, and the reading of the decisions of the courts of last resort in the various states of this Union, I am compelled to say, at least,

that the insurance law, as applied by the courts, is not that fixed, definite and certain rule which Blackstone had in mind when he wrote his commentaries on the English law. One rule obtains in one State, exactly the contrary obtains in another State. So vexed and complicated has become the problem of insurance law that it is impossible for even a Philadelphia lawyer to unravel the tangle and speak with any degree of confidence when he asserts that either this or that is the law as applied to insurance subjects. For this reason and to the end that what I may say in this paper may be of practical benefit, if possible, I shall confine myself to questions on insurance law which have been determined by the supreme court of the State of Washington.

One question which occasionally presents itself to the adjuster is that of the law of garnishment. The supreme court of Washington has already passed upon a few phases of this question and the relation of foreign insurance companies thereto. The insurance adjuster sometimes finds that he is able to agree with the assured upon the amount of the loss, and is ready and willing to admit liability for the amount thus agreed upon, but at the last moment he discovers that the company which he represents has been garnished in another state, and the question presents itself to him as to whether or not this garnishment of the company in another state, under the law, prevents him from paying the amount of the loss to the assured. This precise question was considered by the supreme court of Washington in the case of Neufelder vs. German Am. Ins. Company, 6th Wash. 336. The property insured was situate in the state of Washington and was destroyed by fire on Sept. 19, 1890, and the loss was duly adjusted at the sum of \$1,000. On October 25, 1890, the assured made a general assignment for the benefit of his creditors. Prior to this assignment, creditors of Knox, residing in San Francisco, sued Knox in the courts of San Francisco, and garnished the insurance company in San Francisco. The assignee of the assured sued the insurance company in the Washington courts, claiming that the California courts had no jurisdiction because the situs of the debt was not in the State of California. The supreme court held that the fact of the garnishment in San Francisco was a defense to the action brought by the assured in the courts of Washington. The argument was that the assured himself, might have brought his action on his policy in California or in any other State where the insurance company could be legally served with summons; that the rule was that where a foreign corporation does business in the State of Washington under the laws of that State, and has an attorney there upon whom service may be had, it becomes subject to garnishment in that State and, therefore, the court was bound to hold that the converse of the rule was true, and that the San

Francisco court has jurisdiction in the garnishment proceedings, and that the insurance company, being liable to the garnishees of the assured in San Francisco, could not be liable to the assured in the State of Washington upon the same debt. In this same connection another case, determined some few years ago by the supreme court, is interesting. It sometimes occurs that an adjuster has to deal with a situation where there is more than one garnishment action, and possibly one garnishment in one state and another in another. Before proceeding further, however, on this line I wish to call attention to the proper manner of serving a notice of garnishment against a foreign insurance company in my state. The effort is sometimes made to acquire jurisdiction by having the notice of garnishment served upon some local agent of the company. Such manner of service is ineffectual and absolutely void. The supreme court of Washington, in the case of Dittenhoeffer, et al. vs. Clothing Company, et al., 4th Wash. 519, held that whatever the rule might be with reference to the service of other process upon foreign insurance companies under the statutes of that state, a notice of garnishment must be served in all cases upon the statutory agent of the company, and that the service of such a notice upon a local agent other than a statutory agent, was null and void. In all instances, therefore, where a foreign insurance company is garnished in the State of Washington, the adjuster should, at the outset, ascertain whether or not the notice has been served upon the statutory agent. If such notice was not served upon the statutory agent, the adjuster would not be authorized or justified in recognizing the attaching creditor, or paying any money to him. Such payment would not prevent the assured from recovering the full amount of his loss from the insurance company. The Dittenhoeffer case is of further interest for the reason that it discloses a situation where an adjuster might make an error which would lead his company into double payment of the amount. In order that what I may say shall have a practical benefit, let me make a statement of a situation and then apply the rule thereto. John Jones insured against fire by a policy of a foreign insurance company sustains a loss in the city of Seattle. The amount of loss is agreed upon between the assured and the adjuster. The insurance company admits its liability. In the meantime a creditor of John Jones brings a suit in the state of Washington against him, and causes a garnishment notice to issue and be served upon a local agent of the company. Subsequently a creditor of John Jones, residing in San Francisco, begins, in San Francisco courts, an action against John Jones and causes the insurance company to be garnished in San Francisco. The California garnishment is second in point of time,

but is first in point of law. The garnishment notice in the Washington case having been served upon the local agent is ineffectual and no more charges the insurance company than as though the action had never been commenced. Of course, if the adjuster pays the amount of loss to a garnishing creditor or a judgment which the court had no jurisdiction to enter, he cannot refuse to pay another garnishing creditor who has proceeded according to law nor can he plead such payment in defense of an action brought against him by the assured. It therefore behooves him to see to it before he pays the amount of a loss to a garnishing creditor, that the garnishing creditor has complied with the law as above stated in serving his notice of garnishment.

The situation which I have stated above is likely to occur at any time in the State of Washington for the reason that it has occurred at numerous times in the past.

There is another proposition in which adjusters are interested, and wherein, in my humble judgment, a very common practice is detrimental to the interests of the insurance companies. I am conscious that in what I shall now say I am very likely to cross the views of those who are much more experienced than I in the subject and that in making the suggestion I shall infringe the rule that what everybody does must be right. I am told that it is practically the uniform practice of the adjusters of fire insurance companies, when about to enter into an appraisal to sign, and to cause the assured to sign, what is known in insurance parlance, as an appraisal agreement. I believe that the forms of agreement in use are not identical, but so far as I have been able to discover, they are all subject to the criticism which I shall make. In making this suggestion I wish to repeat that I am dealing alone with the question as it presents itself to me as an insurance lawyer, compelled to practice in the State of Washington.

Whatever reasoning may present itself to the individual man upon a given proposition, or however repugnant it may appear to be to individual logic, all must disappear before the reasoning and logic of the supreme court, when it has plainly said "Thus saith the law." Under the ruling of the supreme court of my State I can present, it seems to me, a very good reason for abolishing the appraisal agreement, and I have been unable to discover from my observations and experience, any sufficient reasons for its use. If there is anything in insurance practice which, like the ghost in Hamlet, arises to disturb the midnight slumbers of insurance adjusters, it is the proposition of waiver. To paraphrase a somewhat old and hackneyed expression, it is waive if he does, and waive if he don't. The track which the courts have left for the adjuster to tread without

waiving the provisions of the policy, is an exceedingly narrow and limited one. The supreme court of my State has applied this doctrine of waiver to the proposition of appraisal agreement, and find their authority therefor in kindred decisions by some of the other courts. Succinctly stated they have held that the entering into an appraisal agreement after the fire, is a waiver of the appraisal agreement, and the forfeiture attached thereto in the policy. It is well to remember in considering this question, that the policy itself contains an agreement to appraise under certain conditions. The right to demand an appraisal in case of disagreement, is given by the policy and in order to avail itself of the provision of the policy in that respect, it is unnecessary to cause an insurance agreement to be signed by the assured subsequent to the fire. The adjuster may well rely upon the contract already made when the policy was issued. The reasoning of the courts on this subject is this: The making of and entering into a new appraisal agreement after a loss, is a departure from the policy and not in pursuance of the policy. It is a new and independent agreement and the appraisal which follows is, therefore, not an appraisal under the terms of the policy, but is an appraisal in pursuance of a new and independent contract. This being so, the supreme court of Washington held, in the case of Davis vs. Atlas Assurance Company, 16th Wash. 232, that the entering into the new agreement for appraisal is a waiver of the right of the insurance company to demand an appraisal pursuant to the terms of the policy as a condition precedent to bringing suit. The practical application of this rule and decision is this: A fire occurs; a loss follows; the assured and the insurance company are unable to agree; the adjuster and the assured enter into an appraisal agreement, appointing the appraisers and containing the usual stipulations of such an agreement, and the appraisers enter upon the performance of their duty; for some reason, and it matters but little what that reason is, the appraisal offered does not result in an award. The insurance company then demands a new appraisal. The insured refuses to comply with the demand and begins a suit against the insurance company. Under this decision the insurance company cannot defend on the ground that it has demanded an appraisal in pursuance of the policy for the reason that the making of the new appraisal agreement has become a waiver of the agreement to appraise contained in the policy. The theory upon which the court thus held that the appraisal agreement was a waiver of the provisions in the policy, was because it contained stipulations not in the policy. The appraisal to flow therefrom would, therefore, not be an appraisal under the policy, but an appraisal under the appraisal agreement with the new stipulations. For instance, in one of the recognized forms of

appraisal agreement I find that the assured and the adjuster agree that the appraisers shall take an oath of a certain form attached thereto; that the return and award shall be under oath; that the method and means to be adopted by the appraisers in arriving at the award is prescribed. None of these conditions or provisions are embraced in the appraisal agreement contained in the policy. It seems to me that the agreement in the policy is clear, and sufficient to meet every condition. When new conditions are attached the appraisalment is no longer the appraisalment referred to in the policy but is one resting upon the independent contract. Its failure, therefore, to result in an award does not give the insurance company a defense on the ground of the want of appraisal. An experienced adjuster, in discussing this matter with me, stated that one of the reasons calling for the use of the appraisal agreement, was that the adjuster desired that the appraisers should be appointed and gotten to work as soon as possible after the loss. This end can be accomplished as well by another means as by the appraisal agreement, and without the objections that obtain thereto. A blank ready for filling out and signing could be used in which the assured and the adjuster appoint their respective appraisers, inserting that the appointment thus made was made in pursuance of the provisions of the policy, and on account of a disagreement between the assured and the adjuster as to the amount of the loss. In this way the appraisers could be promptly named but the instrument would not be an agreement to appraise. It would merely be an appointment of the appraisers in pursuance of the appraisal agreement in the policy. In the case of a dishonest loss, and those are usually the ones which most perplex the adjuster, self interest leads the assured to avoid an appraisal if possible. Self interest, also, leads the adjuster to force an appraisal. I suggest, therefore, that the appraiser operating upon a loss in the State of Washington, should bear this decision which I have cited in mind, and that he should keep strictly within the contract, insist upon an appraisal strictly in pursuance of the terms of the policy, to the end that he may either compel a fair and just appraisalment or defeat an action in the courts on the part of the assured. So long as this decision stands I see no escape from the conclusion that the making of a new appraisal agreement constitutes a waiver of the appraisal agreement in the policy, and puts in the hands of a dishonest assured the ready means of avoiding an appraisalment.

I regret that an unexpected accumulation of business has prevented the preparation of this paper with the care I had intended, and also prevented me from presenting the same in person. I close repeating my thanks to the Association, and sincerely wishing to its members a prosperous and happy new year.

THE NORTHWEST SPECIAL

J. W. Gunn.

Returning home last year from the annual meeting, we had in our party the estimable gentleman now presiding. Scarcely had the lights of San Francisco slipped behind us when he proceeded to blarney me into a promise to read a paper at this meeting. I offered several good and valid reasons why I should not be among the contributors, the best of which was that I was anxious that the program should be a good one. With one stroke of Hibernian diplomacy he swept my objections aside:

"John," he urged, "you write up any old thing you think about—about ten pages would be pretty good. I will put it on the program just preceding the 'Knapsack,' and no one will ever know whether it is the end of the solid stuff or the beginning of the jokes."

The delight of this compliment was in the apparent good faith in which it was handed out to me, and the humor of the situation was that I didn't see the joke until about 48 hours later when I asked him if, in suggesting that he would place my paper, if written, up against the "Knapsack," he expected me to follow Prof. Whitney's theoretical problems.

"Do you know Murphy & Mulligan, the Seattle tailors," he asked.

Yes, I knew the gentlemen, though I couldn't see the context.

"Well," he replied, "both of these fellows are from Ireland. One is an Orangeman and the other a Catholic; and, you know, in Ireland the Orangemen and Catholics didn't sleep well when they bunked together. The Seattle fellows don't quarrel over religion, but they frequently discuss the bad old days when blackthorn sticks voted in every convention and at every election. One day they were talking as usual on the favorite subject, and expressing their satisfaction that the old animosities were dying out. 'Well,' said Jack (the Orangeman) to Jim (the Catholic), 'when you come to think of it, there wasn't much betune us after all. You and me, for instance, the only difference was that you were following the priest around with a bell, and I was following him with an axe.'"

Here Mr. President squinted at me out of the corner of his eye, and I promised that the buffer between the solid stuff and the jokes should not be missing, and that I wouldn't follow Prof. Whitney with either an axe or a bell.

I am one of the few fortunate possessors of a complete file of the Proceedings of this Association, and when I began to look through them for the purpose of ascertaining what subjects had

been overlooked by former contributors, I found to my dismay that everything possibly germane to the fire insurance business had been handled with and without gloves by writers, good, bad and indifferent on various occasions. I would here recommend to prospective contributors that they give the Proceedings prayerful consideration before attempting to spring anything new on the community.

Opportunity, however, that intangible something, said to have whiskers in front and greased lightning behind, got in my way during the closing days of the old year, when the Special Agents' Association of the Pacific Northwest, in annual convention assembled with malice aforethought, elected me to the Presidency. The thought occurred to me then that this Association might be interested in hearing something of our Northern Association; what it has done in its brief history, what it is doing and what it hopes to accomplish, with such side steps into philosophy, morality and imbecility as my erratic thoughts might turn.

In the Proceedings, that Zend-Avesta of the fraternity, already referred to, I read that on Feb. 23, 1876, what we, in this slangy day, would be apt to call a bunch of bully fellows, returning to San Francisco after settling the Virginia City fire losses, where, after days of labor such as try men's souls, they had learned to respect and appreciate each other, proposed, and on the spot perfected this splendid organization—The Fire Underwriters' Association of the Pacific.

Twenty-seven years later, under conditions identically the same, to-wit, the settlement of the Aberdeen, Wash., losses, the Special Agents Association of the Pacific Northwest held its first official meeting.

There were present at that gathering, Messrs. F. J. Alex. Mayer, A. W. Thornton, J. D. Coleman, Geo. A. Crux, C. D. Gabrielson, W. L. Gazzman, P. E. Gerould, Frank L. Hunter, S. P. Messick, Jas. S. Reed, J. H. Richards, H. J. Schaeffer, Chas. R. Thompson and W. A. Williams. In point of ability, I do not know how this list would measure up with the men from Virginia City. I have read somewhere that the special agent has deteriorated, so it would not be safe nor becoming to make comparisons; but, without fear of opening any sprinkler heads, I will venture the assertion that—in this day and generation at least—no sudden order will call together anywhere in this country a brainier, abler, squarer or whiter body of men. I make this statement advisedly, for it will be noticed that several of the Northwest specials were not present.

So, these two organizations, the one now in session, and our Northern Association, were conceived of the same impulses and born under similar conditions. In passing it may be said that there is nothing which brings a man up to the surface, so to speak, like the adjustment of losses, where he meets his competitors as well as the claimants. To protect his company's rights and finances, to be fair and honest with the insured, to conserve the respect and co-operation of his agent, to consider public sentiment and to pit his knowledge, tact, judgment and business acumen against the bright minds of his conferees, not only conduces to the development of large mental qualities, but it is sport which beats hunting the tiger or bucking him.

Friendly co-operation between adjusters, so far as we have any record, may be said to have had its beginning at the Virginia City fire, and from that day to this it has saved the companies hundreds of thousands in good coin of the realm; and who can say what the interchange of thought has been worth, not only to the profession, but to the insuring public.

In addition to co-operation in the adjustment of losses, there were other lines which, we believed, could be worked out to the advantage of all concerned; and about the first thing of a startling nature which we tackled was a banquet, which was a great success. After getting over that we organized for joint inspections. A chairman, or promoter, was appointed in each of the cities of Portland, Tacoma, Seattle and Spokane, and whenever any number of Specials were found in any one of the said cities on the same day the promoter made it his business to round them up, and in a body they would inspect some special hazard, a department store, or some other risk carrying large lines of insurance. Whenever possible, a surveyor and electrical inspector was taken along. One of the number was designated to write the report, and all defects and credits were called to his attention. I believe that every Special who had an opportunity to take part in this work considered it of great interest and practical value. Speaking for myself, I learned more about electricity in one afternoon while inspecting the car barns of the Seattle Electric Co., when our committee was accompanied by Mr. Hughes, our electrical inspector, than I ever did from all the abstruse papers and Handy-Andy books which I had attempted to digest. These joint inspections were of particular value to the younger men of our organization, and, strange as it may seem, these younger men were the innocent instruments of our undoing. A well-known and successful manager, not a hundred

miles from San Francisco, wrote up saying that his Special was a high-class, high-salaried man, but he'd be d——d if he was paying that salary towards the education of a lot of "two by four" field men who were not now, nor never would be, anything more than cheap solicitors masquerading under the title of special agents. Of course we all shouted "To Hell with him," but somehow or other, we never had any joint inspection. Under my administration I hope to see this work revived, and I can't believe that there is a manager in San Francisco or elsewhere who will begrudge to the young special the help he may get from counselling with his elder brother. The years have swallowed wings, and that young man with the new grip and the confidence of youth you saw this morning heading for the ferry may be in your employ, or, is it too much to say, you in his, before the fleeting years have followed each other far into the century.

Thirst for knowledge, which neither Bull Run, Cedar River nor Old Crow could assuage, early led us to a consideration of the library question. Mr. F. J. Alex. Mayer, our first president, placed his fine collection of books and his private office at our disposal. In Seattle we rented a room adjoining the surveyor's office, and, though our collection of books would not strike a novice as being particularly imposing, those of us who live close to the earth, and who have an inclination to dig and grub, have been enabled to find much that has been helpful, valuable and needful. Among the contributions to our library of great value are a complete file of the Proceedings of the Fire Underwriters' Association of the Pacific, presented by Col. C. Mason Kinne; bound volumes of the Coast Review from 1890 to date, from Mr. Geo. A. Crux; a miscellaneous and very acceptable collection from Mr. F. J. Argall, and our old friend and fellow worker, John W. G. Cofran, writes me from Chicago that he will see to it that our file of the Proceedings of the Fire Underwriters' Association of the Northwest shall be completed, etc., etc. Education is needed in this business. To be able to quote Virgil from stem to stern in hog latin or to flounder around in kitchen French may not be a complete stumbling block in the path of an otherwise capable insurance man, but it is a long way from being the real thing. A short pencil and a shingle will put the classics out of business in thirty seconds when it comes to the adjusting of a loss. The fellow who fought his way up by inches from the hard seats in the little red school house, through the college of Hard Knocks and the University of Bitter Experience, has the education that endures—that has sympathy and horse sense in it. The certificate obtained by that graduate is at a premium where the parchments of Yale and Harvard would not be used to flag a hand car. It

is necessary to the success of the fire underwriter of today that he be a close student. The rapidity with which conditions in the industrial world are changing is bewildering, and the practical man will find in the well selected library his opportunity to take a post graduate course in practical affairs.

Our Association, though as yet productive of no material changes in the methods of conducting the fire insurance business, is doing the work of the sower. It is planting the seeds of good practice, good faith and a broad fellowship neither devoid of sentiment nor forgetful of duty. In other words, it is building up a commercial virtue, which, when the specials of today become the managers, or turn to other pursuits, will be to them an asset which no misfortune can take away.

During our meeting at the Lewis & Clark Fair, one of your good San Francisco managers spent a few days with us, and noting with pleasurable surprise the cordial and friendly relations between the Northern field men, remarked that if the same spirit of good fellowship existed among the Southern specials a great deal of the bad faith, contentions, evil practices and chaotic conditions which fill the managers' days with troubles and his dreams with horrors, would be done away with.

If there is contention and strife and bitterness between the California field men, as we have often been told, I think I am safe in saying that we will have to look away from the specials themselves for the cause. We have a contingent of Californians up our way, and it is not too much to say that more capable, genial and genuine gentlemen do not exist anywhere. The trouble must be that the Southern special is a victim of environment. Streams impure at their fountain heads may clarify as they sing their way through rocky canyons and green valleys; and what might be poison to the prospector on the mountain side may give joy and health to the husbandman on the lowlands. Congested conditions always breed disease. Perhaps, when population is more evenly balanced and large enough to justify a general agency center up North, conditions will improve.

As an Association and as individuals we believe in fraternity. When we find a special among us who appears "off color," we know that he is either the representative of an "off color" office or that original sin has been handed down to him in such generous chunks that his handicap is complete. If it is discovered that the "off color" is only the reflection of a bad setting, we use our good offices to the end that the gem may be given a surrounding consistent with its worth. If the flaw seems inherent and ineradicable, we let it alone and it soon takes its place in the eternal fitness of things. Some of the brightest and cleanest specials in the Northwest are brands from the burn-

ing; men who were given a bad start, but who had the moral courage to get right with themselves and their fellow men. It's easy, men and brethren, for a fellow who falls into a good position to do the right thing when he knows darned well that he will be fired if he don't do that right thing; but the young man of high minded impulses who finds himself in possession of a grip and a mileage book and is expected to get business at any cost, is entitled to the commiseration of men and angels. The manager who starts a special agent in this business where strict personal and commercial integrity is so essential, and who instructs, suggests, permits or overlooks on the part of that special a line of conduct out of harmony with good faith and good practice, demoralizes the business, corrupts the local agents, degrades the special and prostitutes his own probity. I know this is an odd sized cap, and that it will not fit a single managerial cranium in San Francisco.

Thus if we have, or if we shall establish, among ourselves what President Roosevelt so aptly terms the "Square Deal," our Association is, or will be, worthy of the confidence and co-operation of every special in the field, and of every manager doing business in the territory.

The Northern special has much of the spirit of self sacrifice. At the call of duty, that obligation, stern as necessity and exacting as fate, we have seen him leave, without protest, the gilded and gluttonous palaces covering the land from Ashland, Oregon, to Sand Point, Idaho, and meekly embrace the simple life of the humble manager, and sit with becoming meekness at the frugal tables of the Palace, the St. Francis, Tait's and the Bohemian Club. In my time the North has contributed to the sum total of the lowly toilers down here, and in other parts of the country, Messers. Devlin, Grim, Fuller, Palache, Conroy, Dornin, Hewitt, Tiedemann, Niebling, Fabj, Deering, Bailey, Crux, Hunter and Berdan, and their marked success is encouraging. Some wretch has said that there is no married woman, be she never so saturated in connubial bliss, who does not sometimes wonder how she would look in widow's weeds, or gravely consider how she would invest her lamented husband's life insurance. On that question I am not in possession of facts sufficient to form a belief, and therefore deny same; but for the specials who are still doing the Northwest, I am bound to say that while not one of them would deliberately poison his manager, I think there would be no hesitation in taking a potshot at a suddenly vacated chair.

Our Association is democratic. We have not put up the bars against any one. We have met the non-boarder and have taken him into camp. As a rule he is a good fellow and our treatment of him has reduced rate cutting to the minimum in

all of the non-board offices, except in that of the Chief of Sinners, which seems to pursue the evil tenor of its ways unwhipped and unpunished.

The Special Agents' Association should be, and I hope will be, an important factor in the business of the Northwest. The territory is out of the immediate supervision of the manager. The specials in the South have the opportunity of meeting their principals for personal consultation on an average of at least once a month, while we consider ourselves lucky if we get to our offices once a year. The manager who sends a special north does it largely on suspicion and no doubt with many misgivings. The apron strings are cut, and it is up to that special to make good. Notwithstanding telegraph, telephone, mail and express, the business of his office and his manager's good name and fair fame is largely in his keeping, and I maintain that he has fought a good fight and has kept the faith. Managers might unload themselves of a great deal of worry, responsibility and expense by turning over to the Northwest Association two questions which have led to much misunderstanding, not a little bad feeling and a great deal of unnecessary expense. I believe that the Northern specials would be willing to assume the responsibility and guarantee a great and lasting improvement in public legislation and in the government of our rating boards. These are questions which can hardly be discussed here, and I will dismiss them with the bare and bald statement that the companies themselves are responsible for every line of unfriendly legislation on our statute books, and for the public distrust of, and hostility toward, our rating board.

The Special Agents Association of the Pacific Northwest is not a rival of the Fire Underwriters' Association of the Pacific. It is, rather, an auxiliary organization, doing a work in a distant part of the field along the lines mapped out 30 years ago by the fathers of the older Association. The golden rule might well be adopted for our motto, and we still believe that the lion and the lamb may lie down together without the necessity of the lamb being inside the lion.

HAWAIIAN SUGAR MILLS AND THEIR FIRE HAZARDS.

A. R. Gurrey.

The exports from these islands last year were valued at \$36,126,797. Of this amount, \$35,112,148 was for sugar. These figures will serve to show the importance the sugar industry is to us better than anything else—it is the life of our business here; depress its value and we all feel the result; send it skyward and we are all comparatively happy.

There are about 48 mills in the Territory of Hawaii, which made last year some 426,248 tons of sugar, which, with the exception of the output from one mill, was all refined on the mainland.

By the latest statistics obtainable the plantations employed 42,242 laborers—of these 31,029 were Japanese, 3,927 Chinese, 2,036 Porto Ricans, 1,493 Hawaiians, 1,032 Caucasians, 2,669 Portuguese, the small balance being South Sea Islanders and negroes. The plantation hands live in rough up and down board buildings, one story high, generally well separated, built high above the ground for sanitary reasons, containing from one to five or six rooms, though sometimes they are much larger. These buildings are arranged in clusters in different parts of the plantation and are called "Camps." The cooking is done in sheds apart from the other buildings and the empty coal oil tin, with one side partly cut out, set on the ground, is the usual stove.

The plantations run their own stores, although near the camp there are generally some Chinese or Japanese stores. These latter are cheaply constructed, containing small stocks of goods, with all sorts of appendages in the way of outbuildings. Coal oil is used for lights and cooking is done on the coal oil can stove, but the buildings seldom burn. No inventory is ever taken of the stock and the only accounts kept are the credit sales, of course in the Chinese or Japanese language as the case may be, so an adjustment is not as a rule satisfactory, at least not to the adjuster, though it may be to the claimant.

Around the camps the cane fields stretch in miles of green. There are few fires in the standing cane, although there is a time in its growth when the lower leaves are dry, when there is considerable danger, but after a fire the stalks, which will not burn, can be cut and crushed without much loss if it is done at once before the juice ferments. There has been some insurance effected on the growing cane at times in the past, but the values are so great and the acreage so large that the expense does not seem to be warranted by experience.

When the cane is ripe it is stripped of its leaves while still standing, and cut.

It is then loaded on the cars, which are run on portable tracks into the field and hauled in long trains to the mill—the plantation being gridironed by miles of permanent railroad centering at the mill. The cars loaded with the stripped cane are, when they reach the mill first weighed, then backed into the cane carrier shed, which is a long open shed adjoining the mill at one end. The cars are run on a track along the side of an endless carrier running in a pit, where the stakes are removed from one side of the car and the cane pulled off on to the carrier, which conveys it into the building to the grinding mill.

The mill room is generally one story, iron or steel on iron frame, with concrete or concrete and wood floor and iron roof, and contains the mill and engine—little, but the heaviest kind of machinery, on solid foundations. Here the cane is crushed under heavy and varying pressures and the juice runs off in a dirty stream, while the refuse of the cane, now in small pieces, and still damp, is conveyed by an endless iron carrier to the adjoining boiler room. From the carrier are iron chutes to the furnaces, and out into the room, where the surplus trash, or bagasse as it is sometimes called, goes. In some mills more trash is made than can be consumed, while in others they need all the trash they can make. In the former the trash accumulates, often filling the room, and there is danger of spontaneous combustion, though even when it gets dry, it does not burn readily without a good draft. Sometimes the surplus is used for the outside pumping plants, to which it is removed as it is needed; sometimes it is kept outside the mill in piles, often covered with roof. The boiler room, however, is of iron, with iron floor and roof on iron frame, at the end of which are the bricked-in boilers and under it are the ash pits. The ash pit room should always be inspected for wood work near the furnaces, for accumulation of dunnage, for it is often ill-lighted and is a handy place to put things in. Both the boiler room and under it should be well provided with water and hose. In some mills they are using crude oil for fuel in addition to the trash, but it is generally under the boilers used for the pumps, which are always working.

And now to return to the mill, as it is not within the scope of this paper to describe the process of making sugar, but merely to show something of the fire hazard of the sugar mill. I shall touch on this part lightly. The juice after leaving the crushing mill runs through strainers to the lining tanks, then through heaters to the settling tanks, in which much of its impurities are left; then it starts again on its travel through filters more or less directly to the triple or quadruplicate effects. These are

evaporating machines. It comes out of these effects and goes into what is known as the vacuum pans and crystallizing tanks, then to the centrifugals, where the molasses is separated from the sugar. Then centrifugals are arranged along one side of the sugar room and the sugar is emptied from them down chutes into bags, which weigh, when filled, 125 pounds. The sacks of sugar are weighed, sewn up and piled, awaiting shipment.

The machines through which the juice passes is all of metal, the floors are either iron or heavy three-inch planks on iron girders resting on iron columns, and the hazard of this part of the manufacture is very small. There's always plenty of water though fire hose is apt to be lacking. Steam pipes are on iron hangers and for covering asbestos in some shape or other is generally used, though I have seen sacking, rope and lapa^{hala} leaves around the exhaust steam pipes. This looks probably more dangerous than it actually is, as there is so little that could possibly burn and nothing that could make a blaze in the part of the mill where the steam is used and when the mill is running, which it does night and day, Sundays only excepted, there are always many hands around and anything like a fire would be seen at once and would be easily extinguished. The sugar room is a point of some danger. Here the floor, which is of wood, is raised above the ground and at times there may be a large quantity of sugar on hand awaiting shipment, but as a rule it is shipped daily. There is no danger in the sugar itself, but it forms a fuel that will burn fiercely when it once gets started. The mills are lighted by electricity, the dynamo room being in the mill and, owing to the constant repair and change in machinery, the wires are apt to suffer. The current is also used for the lighting of other plantation buildings besides the mill. The machine and carpenter shops where the smaller repairs are made are often inside the building, the latter consists of a bench and a few ordinary tools and such facilities for doing repair work as are found in all plants.

Lime is used and two or three days' supply—say from 5 to 15 barrels—is always on hand when the mill is running, the supply of lime being kept in an outside warehouse. Some mills make their own lime from coral, of which there is an unlimited supply. The kilns are iron and brick and are well and safely constructed and I cannot see that they add to the hazard. They are generally located at a distance.

Oil—the best grades of mineral lubricating oils only are used. The main supply is kept outside.

In the preceding pages I may have made it appear by dwelling upon them that the hazards of the ordinary mill are greater than they really are, so I will recapitulate them.

The greatest danger is in the trash and trash room. Then

comes the much lighter hazard of the electricity, the machine and carpenter shops, if inside, steam pipes in iron hangers and the usual hazards of operating machinery in a building constructed almost wholly of iron, open and accessible in every particular, full of iron machinery, with ample water supply, but with generally a shortage of fire hose, with nothing in it of a dangerous inflammable nature and no woodwork except the heavy floors, with the trash, if any, at one end of the building and sugar in bags, if any, at the other end, well separated by a mass of heavy machinery.

It is, too, to be remembered that a serious fire in a mill means probably the heavy consequential loss of the crop worth probably two or three times the value of the mill and its contents.

In the more modern mill there seems so little to burn, especially between seasons when there is no trash or sugar on hand, and we have never had a fire in one of these mills, that it is always a matter of speculation as to how much damage a fire could possibly do. If there were sugar on hand the heat from it burning would make a bad loss on the machinery, but the chances of it taking fire are so very slight that the danger is far from serious. The trash would make more of a smouldering fire and the damage would be confined to the boiler room. We have virtually had no experience with mill fires although within the past month a fire happened in one of the older class of mills on the Island of Hawaii, the first for about 20 years. The origin of this fire was probably a cigarette and the claim will be between \$20,000 and \$30,000. I have no particulars of the loss.

Sugar warehouses are located at the landing and on the windward coast of Hawaii, where there are quite a number of plantations. They are located on the bluff overlooking the ocean, the sugar being transferred to the steamer by trolley, one end of which is made fast to the vessel. This, of course, means an engine in or near the warehouse. All the supplies for the plantation are hauled up by the trolley and everything goes into the sugar warehouse, temporarily, or permanently, as the case may be.

Plantation stables usually consist of an iron roof upon uprights with a gangway between the two rows of mangers for feeding purposes. Green cane tops is the feed, sometimes sprinkled with molasses, of which the hores are very fond. Hay is seldom fed.

The photographic prints attached hereto, which show so well the different matters I have touched on, were obtained through the kindness of Messrs. T. H. Davies & Co., and I take this method of thanking them for their courtesy.

ELECTRICAL INSPECTIONS FROM THE "SPECIAL AGENT'S" POINT OF VIEW.

W. E. Hughes.

In strictly adhering to the above title, the subject becomes somewhat difficult, owing to the vast difference between the inspection made by one following it as a business, making it a study in all its phases and that made by the special. In making this statement the writer does not mean to cast any reflections, on the contrary experience has demonstrated to him that the field of special agents has in its composition some exceptionally bright men, and the difference above referred to could be condensed as follows: One inspection is thorough, the other superficial. Now while there can be no question regarding the value of the one as compared to the other, yet the inspection which could be made by the special would have a great tendency to lessen the electrical hazard, especially if he would devote some of his attention to the subject and when the opportunity afforded accompany some regular inspector to the buildings which he is to inspect, this would be a practical lesson and I venture to say that a few such trips would represent to him more knowledge than a month spent in studying rules. In speaking of rules I wish to state that rules issued governing the installation of wiring for electrical apparatus cannot always be followed, owing to the varied conditions; however, the rule can be treated as a guide using careful judgment where deviations are necessary.

As the special seldom surveys a building during the course of construction, the suggestions which will be made will be confined to the visible portions, and open wiring, in old buildings, with a suggestion or two regarding generators and motors, but before doing this I would ask permission to make a suggestion, do not be too hasty in making a survey, be careful that you have thoroughly investigated before making recommendations, as it would be rather embarrassing to have to recede from the stand which you may have taken.

Defects Which May Be Readily Detected.

1. Is the building protected by a cutout and switch which will disconnect the service wires at a point as near as possible to that at which they enter the building?
2. Are the wires protected by insulating bushings where they enter the building? Do these bushings slant down so as to prevent the entrance of water?

3. Are there any loose connections where wires enter cutout or switch?
4. Is the lighting divided into proper number of circuits? That is to say are there more than 12 Sixteen C. P. lamps or their equivalent on any one circuit? Are these circuits controlled by individual cutouts?
5. Are the branch cutouts properly fused? There should never be a fuse larger than 10 amp. placed in a branch cutout where used for lighting purposes.
6. Are the cutouts of the open link or plug type? If they are open link are they enclosed in a dust-tight cabinet, lined with asbestos? Is the door to the cabinet provided with good hinges and spring catch or hook?
7. Are any of the cutouts surrounded by inflammable material? If so they must be enclosed in a cabinet.
8. As wiring is necessarily congested, where entering centers of distribution, they must be protected by flexible tubing where crossing each other, or where they may come in contact with surfaces.
9. If wires are run open, are they supported by porcelain knobs or cleats? The spacing between supports not to exceed four feet six inches. Are they protected where crossing each other and where it might be possible for them to come in contact with piping or other conductors? Are they protected by porcelain bushings where passing through partitions or wood work?
10. Are the wires protected from mechanical injury? That is to say, are they run down walls behind shelving, or in the open, for the purpose of reaching switches or possibly to furnish lighting in a floor below. If run behind shelving they must be placed in moulding, or flexible tubing. To a height of seven feet from the floor wires are always considered as open to mechanical injury, and must be protected by moulding, flexible tubing in such instances would not be sufficient and it might be necessary to place them in conduit, for instance in such places as heavy cases are handled or trucks used.
11. Are all joints or splices thoroughly soldered; are they properly taped, using both rubber and friction tape?
12. If cord drops are used suspended from rosettes on ceiling, the following defects may appear. Rosette used as a support for the line wire, making long stretches between the proper supports (the main object in ruling against this is the possibility of the rosette being removed for the pur-

pose of placing it in another position, in which case the wires will sag and possibly come together) does the same rosette feed more than one cord drop?

13. Is the cord used for drops of the proper quality?
14. Is the cord such length as would allow the lamp to come in contact with surrounding objects (the length of all cord drops in the open should be so regulated that when fully extended the lower portion of the lamp will clear the floor by five foot six inches)? Tying knots in cords is strictly advised against.
15. Is the lamp protected by a wire guard? This would be necessary where placed in aisles with shelving on one or both sides.
16. Are the sockets lined?
17. Are cord drops used as a support for clusters?
18. Are cord drops used in show windows? In the absence of fixtures in show windows approved flexible conduit may be used.
19. Are the fixtures equipped with insulating joints?
20. Is there a metal ceiling, if so is the canopy of the fixture provided with a canopy ring to insulate it from the ceiling? In the absence of ring the insulating joint is valueless. In case the wiring is of the open class, are the wires bushed where passing between the canopy of the fixture and the ceiling?
21. Has there been any branch gas piping run from the outlet above the canopy, and coming in contact with same?
22. Has the telephone company run any ground wires to the gas piping above any fixtures? Are the telephone wires protected by fuses at the point at which they enter the building?
23. If lighting is used in a room where inflammable gases are present the lamp should be enclosed in a vapor proof globe; no switches should be used in such a room.
24. If snap switches are placed on a wall, or even in cabinets are they provided with bases to prevent the wires coming in contact with the surface? This would also include receptacles (this error is very likely to happen where wiring is run open).
25. Where moulding is used it should never be placed on a brick wall unless a backing strip is used, this strip to be thoroughly impregnated with a moisture repellent, the moulding shall have at least two thorough coats of shellac both inside and out, before being placed in position.

Where moulding is placed on the wall or ceiling in a building where metal lath is used, the backing strip must not be omitted care must also be taken that the screws or brads which secure the capping of the moulding are placed properly and do not come in contact with the conductors.

26. Where any ceiling is composed of the open joist, and wires are run at right angles with the same, there shall be a backing strip used to protect the wires from mechanical injury (such as using them as a support for lumber or other articles placed between the joist).
27. Each arc lamp shall have an independent circuit.
28. If a generator is used in the building the following points should be considered: Is the base frame thoroughly insulated? Is it kept clean and free from oil drippings?
29. The switch board for a generator should be made of marble, slate, or hard wood in skeleton form well filled to prevent absorption, and should be equipped as follows: Machine switch and fuses, switch and fuses for each lead to centers of distribution, ampere meter, volt meter, ground detector, and field rheostat. The switch board should not be placed in the vicinity of any combustible matter, and should be accessible from all sides.
30. Where motors are used in a building, each motor should have an independent circuit from a center of distribution, located in a dry place thoroughly insulated, and kept perfectly clean, shall be equipped at motor with cutout operating switch and automatic release on control or starting box, motors should not be placed where exposed to the flyings of combustible material.

The foregoing suggestions, while they would not constitute a thorough inspection of an electrical risk, yet they would go a long way toward its betterment, and could be applied in a general way to small installations. The question of power plants has not been touched upon as I am free to say that a survey of this kind must be made by one thorough in all details of the business.

For a moment let us consider the qualifications necessary in one who is to follow electrical inspections as a business, especially if he is to represent insurance interests.

First—He shall have a technical education, as he must come in contact with the heads of power companies, and, for the sake of brevity, we will say these parties are no fools.

Second—He must be a practical man, as he who finds fault

with another's work must be in a position to explain how it should be done.

Third—He must not think he knows it all, as that man is not living.

Fourth—He must be diplomatic, as it is very easy to antagonize the assured.

Fifth—He must be capable of using good judgment, as in the inspecting of old risks, it is often possible to remove all of the hazardous features, and yet not completely rewire the building.

Sixth—He must be thoroughly posted regarding all Electrical fittings and capable of making the required tests, if it should be necessary.

Seventh—Treat all alike, remembering that in business friendship ceases and that a true friend would never ask another to violate a trust.

COST OF MANUFACTURING LUMBER AND SHINGLES.

A. W. Thornton.

One of the most difficult tasks that an adjuster can encounter is the ascertainment of the exact cost of any manufactured article, and unless the books of the assured have been kept in a first-class manner and have been saved from destruction by the fire, the difficulty is almost, if not quite, insurmountable. Innumerable items enter into the computation—original investment, cost of raw material, expert and common labor, fuel, oils and other supplies, labels, packing, royalties, improvements, developments, extensions, interest, insurance, taxes, depreciation, etc., etc. Shut-downs, strikes and extraordinary conditions are also to be reckoned with. And who will say that advertising and the expenses of traveling salesmen should not enter into the cost of the manufactured article ready for market. However, it is the intention of this Paper to take up shingles and lumber as a manufactured product, and in a measure the problem is simplified by the elimination of the charges for royalties, labels, packing, etc.

Choosing the simpler of the two, we take up shingles first, and will not complicate matters by dealing with the question as to whether or not shingles are covered under a policy on "lumber." "Much might be said on both sides," but the writer, in spite of the many arguments to the contrary, is of the opinion that shingles are not lumber.

Perhaps a little explanation of the shingle industry may not be amiss here. They are produced in two classes of mills—the "combination plant," cutting lumber as the principal article and shingles as a by-product; and the mill cutting shingles exclusively. These are again divided into two classes—the "wet log" and the "dry log" mills, depending on whether or not the logs are kept or stored in a river or pond, or are sawed direct from the logs or bolts without passing through a river, creek or pond. Bolts, by the way, are simply four-foot lengths, cut from the trees and split into quarters for convenience in hauling by wagon from the woods to the mill. Logs are sold by the board-measure scale—bolts by the cord.

The simon-pure shingle mills are again divided into "upright," "double-block," or "ten-block" mills, according to the shingle machines used in sawing. In the "upright" the saw travels vertically, one block only being in the machine at a time. The sawyer feeds the machine and also joints the shingle in a circular rotating plane. The process is slower, the result a better shingle than made in any other manner.

In the "double-block" the saw travels horizontally, the carriage passing over the upper surface of the saw and holding two

blocks, one at each end of the carriage, so that each forward and backward motion of the carriage cuts two shingles.

In the "ten-block" are two horizontal saws on a parallel over which runs a large circular frame, with spaces for ten blocks, and each revolution of the frame cuts twenty shingles. The "block," be it known, is the quartered section of timber, about twenty-six inches long. The "ten-block" is the cheapest method of production, but usually the poorest shingle.

From the "single-block" (little used except by the combination mills), the "double-block," or the "ten-block," the shingles drop to a lower floor and are trimmed by knot-sawyers, sorted and thrown into bins, from which they are packed or woven into bundles of 250 shingles each. From the latter class of operatives has arisen the name "shingle-weavers," now applied commonly to practically all employes of shingle mills. En passant, be it said, that few shingle-weavers graduate into the ministry—their career is rather one of frenzied finance in dissipating their earnings.

A great part of the output is "A's," commonly known as "Stars," now selling at about \$1.40 per M., F. O. B. at mill. "Standards" are practically culls, worth approximately \$.60. "Clears" are a better class, worth \$.30 more than "Stars," or about \$1.70. The "Clears" are a heavier shingle, cut 5-2 (or five shingles to two inches in thickness), while the "Stars" are 6-2 (six shingles to two inches of thickness at the butt, or 1-3 of an inch). The difference in the cost of production of the "Star" and the "Clear" is merely the difference in the material used, there being no extra labor.

"Dimensions" and "Fancy Butts" involve additional labor, as they are cut to uniform width, the latter trimmed on the thick end to a specified design. "Dimensions" run about \$1 per M. more than "Stars" on market price.

A good shingle sawyer makes his butts even and uniform, with thin tips, but no "feather edges." Mills with a reputation of making good shingles at all times command five cents or more above market price; while uneven butts or feather edges will meet with heavy penalties in prices. There are makers who never get full market price for their product for this very reason.

A year or so ago the writer sent proofs of loss on a kiln of shingles to San Francisco, and in his report referred to "underweights" as being a material factor in the adjustment. From the replies he received he is led to believe that "underweights" are indistinctly understood. A few words on this topic may not be amiss.

Years ago the shipping weight of 1 M shingles was fixed at 200 lbs, for "Stars"—"Clears," of course, being heavier; but as methods of drying improved the standard was reduced to 180

lbs., and again cut until today it is 160 lbs. When "Stars" are quoted on the market—say on the Sound—at \$1.40 per M. and the freight rate to the Eastern shipping point is \$.60 per cwt., the price quoted to the consignee is \$1.40 plus \$.96 freight (160 lbs. at \$.60), or \$2.36. If, when the car is weighed, the shingles average 140 lbs. per M., it will readily be seen that the mill man has saved the freight on 20 lbs. on every 1000 shingles, or 12c, and he has therefore made 12c on "underweights," his shingles netting him \$1.52. Trouble may have arisen in the drying so that the actual weight is 170 lbs. or 180 lbs., and he therefore loses 6c or 12c per M., his product under such circumstances yielding him \$1.34 or \$1.28 as the case may be. It is not a fact, as one manager suggested, that if the shingles weigh less than standard weight the producer must furnish more shingles to make up the difference.

Shipments by vessel are by measured ton, not actual weight; hence "underweights" are not a factor in cargo shipments.

The sawyers, knot sawyers and packers in a shingle mill usually work "by the piece" or per M., the scale being pretty definitely determined. It is therefore a very simple matter to arrive at this cost. The books will reveal the amount of the original investment—if not it can be otherwise determined—and on this the going rate of interest can be easily computed. Depreciation in this, as in all other adjustments, is a matter of agreement with the assured. It will be found amusing how different are the claimant's views when reckoning the loss on building and machinery under the insurance thereon and deciding on depreciation as an item in cost of manufacture.

Taxes, repairs, insurance, etc., are matters of detail. Having found from the books the cut by the month or the year, as the exigencies require, the simple process of division will give the cost per M. shingles for each item entering into the cost of making, leaving only the cost of the raw material.

A log scaling 1000 feet board measure will cut 10,000 or 11,000 "Star" shingles; a cord of bolts about half of that amount. And I leave it to your ingenuity to figure out why 128 cubic feet of bolts are equivalent to but 500 feet of log scale, or about 42 cubic feet.

The log scale at the pond or the bills for bolt shipments will, when compared with the daily tally of the cut, show exactly the number produced from 1000 feet of logs or a cord of bolts.

Having ascertained all these items, there remains but the price of the raw material. If bought on the open market the problem is a simple one; but if logged from the owner's timber limits the method adopted by many adjusters is to ascertain the cost of the stumpage and add the expense of logging and hauling to the mill. This seems to be a complex, complicated and incorrect method. What difference does it make to the insur-

ance companies if the assured has stolen his timber lands, has purchased them at less than their actual value, or received them as an inheritance or as a present?

The logging part of the industry is frequently separate and distinct from the operation of the mill, and conducted by a subsidiary corporation or company. The Smith Mill Company may own and control the Smith Logging Company, and both be owned by Smith and his wife; the logs are bought from the logging company at market price by the mill company. In this instance the adjuster must take market price as his initial point. Why not do the same with Jones, who does the logging and manufacturing under the one firm name?

The writer believes that the proper course in this and similar matters is to compute the raw material on its market price at the time and place of the fire. In figuring the cost of manufacturing flour, we take the wheat at market price the day of the loss, and would consider it absurd to enter into the cost of raising wheat, even though the miller produced his own crops. What is the difference between wheat and logs, from our stand point? What is the difference between shingles and flour as a manufactured product? The logs are practically as staple as wheat. All natural products constituting part of a completed manufactured article should be taken at market price. This is a point worthy of your serious consideration.

Taking now a shingle mill plant costing \$7500, cutting 100 M. per day, with cedar logs at \$7.50 per thousand feet, let us schedule the items entering into expense of manufacture. One thousand feet of logs worth \$7.50 will cut 11M "Stars." or

	Cents
Raw material, per M.....	68.2
Knot sawyer (piece work)	10.0
Packers (piece work).....	8.0
Sawyer (\$4.50 per day)	4.5
Filer (\$5.00 per day)	5.0
Knee-bolter, draw-saw, pond man, helper and splitter, and loading	10.5
Block carrier	2.0
Tallyman	2.0
Engineer, fireman and watchman	8.0
Management	4.0
Interest	3.0
Insurance (fire and liability)	4.0
Incidentals and supplies	5.0
Repairs	8.0
Depreciation	2.5
Total	144.7

With "Star" shingles at \$1.40 on the market and costing \$1.44 to manufacture, it looks like a losing game, particularly as there is always 3 per. cent. cash discount from market price. It must be remembered that there is an average of nearly 15 cents profit for underweights, and the culls or "Standards" have not been taken into consideration. Probably a reasonably correct solution of the problem would be:

	Cents	Cents
Manufacturer's cost per M., as above		144.7
Less profits from "Standards"		6.0
		<hr/>
Net cost		138.7
Market price	140	
Underweights	15	
Profit to producer		16.3
	<hr/>	<hr/>
	155	155.0

The question naturally arises here, what is the market price, \$1.40 or \$1.55? It is certainly \$1.40 F. O. B. mill on basis of 160 lbs. per M., but \$1.55 at destination (freight eliminated) on basis of 140 lbs. What measure of indemnity does the policy provide? In the absence of any conditions in the form it is unquestionably the intention to pay, in such a case as the above, \$1.387; but with a contract reading "market price at time and place of fire," the basis of settlement would be \$1.40; while with the "¾ths. value clause" the price of \$1.55 would undoubtedly govern.

The above figures are for "Stars;" "Clears" are increased by the cost of additional material. One thousand feet of timber will make about 9M "Clears," and at the above quoted price the cost of the raw material would be 83.3 cents, increasing the cost by 15.1 cents per M., making the total cost of "Clears" \$1.598.

Within the past week a mill man gave me the following figures from his books. He had not sustained a loss, and furnished the information as a matter of friendship.

Cost of manufacturing "Clear" shingles in "upright" mill, capacity 70,000 per day:

	Per M.
Timber	\$0.85
Sawing and jointing .....	.15
Packing .....	.08
All other labor .....	.42
Repairs .....	.15
Interest .....	.12
Insurance .....	.05
Incidental expenses .....	.05
Depreciation .....	.10
	<hr/>
Total	\$1.97

The items of interest, repairs and depreciation are out of proportion as the interest at this rate would figure \$2500 a year, and the depreciation over \$2000. We would scarcely feel justified in settling on these figures, even if "Clears" were worth more than at the present time—\$1.70.

No charge is included in this schedule for drying. Why? Interest, depreciation and repairs are included on the entire plant; also fireman and watchman. Fuel costs nothing, as the refuse is used. Therefore there should be no additional expense for this item.

The discussion of the shingle cost has dragged out to greater length than at first expected, so we will pass by the computation of the cost in a "combination mill" and take up the subject of lumber.

The same method is applied in ascertaining the cost of this commodity as of shingles, so far as interest, depreciation, insurance, taxes, labor, etc., are concerned. And exactly the same arguments apply as to the proper method of arriving at the cost of raw material, namely, the market price of logs at the time and place of fire should be the initial point. To adjust on a basis of "stumpage," logging, hauling, etc., is not just or equitable, and yields varying results.

Here is a method of computing cost of production taken from the books of a mill that burned in Eastern Washington:

	Per M.
Cost of logs	\$4.39
Sawing, labor \$1.50, supplies \$.20	1.70
Piling in yard .....	.32
Taxes, insurance, interest, contingent expenses, etc.	1.22
	<hr/>
Total cost per M. feet	\$7.63

An expert bookkeeper was employed in this mill and the figures are reliable.

Still another method was furnished the writer, but in this instance no insurance was involved. You will notice how close the estimates run:

Saw mill labor, three months	\$ 4,854.63
Planing mill labor, three months	1,155.80
Logging	4,526.68
Repairs and improvements	657.45
Skid road	483.66
Mill supplies	370.67
Logging supplies	496.92
Oils	121.64
Insurance and taxes, pro rata	375.00
General expense	1,285.53
	<hr/>
Total	\$14,327.98

	Feet.
March cut	772,000
April cut	740,471
May cut	722,000
	<hr/>
Total	2,234,471
Cost per M. feet	\$6.41
Cable .....	.20
Stumpage	1.00
	<hr/>
Total cost per M. feet	\$7.61

Not long ago I was called upon to adjust a loss on lumber in connection with a saw mill on Puget Sound, where the assured claimed cost of production, according to his books, to be over \$13 per M. Knowing that the plant had been making money—which was impossible at this price—I insisted that these figures must be incorrect. After some argument I asked if it was not a fact that they had a modern and convenient mill, enabling them to manufacture at least as cheaply as the average mills in their vicinity. Receiving a reply in the affirmative, I asked if they were willing to accept an average price, if it could be conclusively proven to them. To this they also agreed, and an average cost of production for 16 mills on Puget Sound was shown them, where the total average cost was \$10.23. The loss was settled on that basis. The assured were in no way surprised at the figures presented to them, as they were at that very time locked away safely in their desk. Their surprise was that the information was in my possession. Let me explain.

Some time ago the Pacific Coast Lumber Manufacturers' Association, with headquarters at Seattle, sent inquiries to each mill in the Northwest, asking for the cost of logs, sawing, yard, dry kiln and planing mill expenses for each 1000 feet of lumber manufactured. Replies was received from 110 mills, which were divided into districts, where the conditions were comparatively similar, and the results sent out by Secretary Victor H. Beckman under circular No. 113. Let me say to you, gentlemen, that you will find it impossible to secure one of these circulars, and the copy from which the figures below are made is the only one, probably, that has ever found its way into the hands of an insurance man. Knowing that they will be of interest to you all, and believing they may be the means of preventing some exorbitant claims, they are here presented.

"COST OF PRODUCTION."

"Following is a tabulated statement of the cost of lumber

COST OF MANUFACTURING LUMBER.

production in the different districts of the Pacific Northwest, which should be of interest:

No. 1.

	Average Cost Per M. Feet.			
	Sawing	Yard Exp.	Dry Kiln	Planing Mill
Grays Harbor, 5 mills	\$1.28	\$.87	\$...	\$1.08
Puget Sound, 16 mills	2.13	.94	.67	.92
Interior mills, south of Tacoma, 17 mills	1.79	.76	.63	.89
Interior mills, north of Seattle, 25 mills	2.73	1.00	.95	1.19
Shoalwater Bay, 3 mills	2.17	1.08	.75	.87
Columbia River, 7 mills	1.51	.88	.89	1.09
Eastern Washington, 9 mills ..	1.78	1.34	.82	.88
Interior Oregon, 20 mills	2.85	1.04	1.14	1.55
Idaho, 8 mills	2.53	1.18	.50	1.42
Total, 110 mills.				

No. 2.

	Average Cost Per M Feet.	
	Logs.	Total Labor, Logs, etc.
Grays Harbor	\$6.18	\$11.89
Puget Sound	6.18	10.23
Interior mills, south of Tacoma.....	4.33	9.25
Interior mills, north of Seattle.....	4.26	8.09
Shoalwater Bay	6.00	10.33
Columbia River	4.94	7.33
Eastern Washington	4.14	8.08
Oregon	3.71	8.68
Idaho	4.19	9.06

No. 3.

	Average Per cent Per cent out- Daily output, No. 3 and put sold be- feet. better from low cost.		
	logs.	logs.	
Grays Harbor	91,000	21	37
Puget Sound	71,000	26	30
Interior mills, south of Tacoma.....	43,200	23	20
Interior mills, north of Seattle.....	35,500	22	32
Shoalwater Bay	65,000	24	43
Columbia River	44,000	30	36
Eastern Washington	29,375	31	15
Oregon	19,474	24	10
Idaho	19,250	29	12

"The average cost in sawing and handling in Table No. 1 does not appear to tally with the total cost, but when it is known that only a small number of mills in each case filled out the report, the average may appear larger than it really is. In each case all the mills filled out the report relative to the cost of logs and the total cost and by adding these figures together and dividing by the number of mills reporting, the total was arrived at. Therefore, while tables No. 2 and 3 are complete and represent the actual cost, the chief value of table No. 1 lies in the comparative cost of sawing and handling in the different districts."

The above figures are correct, being, as said before, an average from 110 mills. Care, however, should be exercised in using this information in an adjustment, lest either the assured or the company suffer, for a change may have taken place, either in the price of logs or the wage scale, raising or lowering the final result.

It has been argued by many adjusters that the cost of making cull lumber is exactly the same as the cost of manufacturing the "upper" grades, and that, therefore, the indemnity on all grades should be exactly the same, whether culls, common, flooring or clear cedar. Others contend that the grades selling for less than the cost of production should be paid for on basis of market price, the upper grades on cost of production. There is merit in this argument if the cost of the higher grades has been properly regulated to compensate for the loss on the cheaper varieties. If, however, it is unfair or incorrect to pay the manufacturers cost, say of \$10 per M. for culls which have burned, worth only \$5 per M., it is equally unfair to pay the cost of production on each 1000 feet cut, say \$10 as above, for vertical flooring or clear cedar, worth \$25 to \$35 on the market.

If a log is cut into several grades of lumber, running from \$5 to \$30 per M. feet, it is true that the expense of operating is exactly the same for each M. feet run through the mill; but the raw material entering into each grade is of different value. For instance, the part of the tree, from which the vertical grain flooring is cut, is of great value, while the outside, or sap, made into lath, is practically worthless. The total cost of the completed product, including raw material, is, as a consequence, greater for the upper grades. The calculation of this problem is impossible by any system which has for its basis the cost of timber plus labor and expense. But there is a method which the writer has used in some instances which seems to yield equitable results, and he presents it here for discussion and criticism.

Having ascertained the number of feet sold during a given period, preferably for a year preceding, with the net profits thereon, based on carload prices as shown by the books, the per-

centage of profits, or the profit per M. is easily determined. Deducting the ascertained profit from the known market price of similar quantities, the difference is the cost of production. As an example, if 2,000,000 feet of all grades have been sold during the year for \$250,000, which cost to make \$200,000, the profit is 25 per cent. Flooring, therefore, which is quoted on the market at \$30 for similar quantities (carload lots probably), has cost \$24 to make; common dimension, worth \$12.50 on the market, cost \$10, and culls worth \$6, cost \$4.80.

This method would be applied if but one grade or one article was produced, or in settling a merchandise loss, where the profits vary widely on different goods. Why is it not applicable to many articles manufactured in the same plant, or several grades of the same article?

To the advocates of the "market price" theory of indemnity, let me say a word in conclusion. A settlement on this basis (market price), awards the assured more than he could possibly realize in any other manner, for no consideration has been given to the expenses of selling, cash discounts, bad debts, depreciation of the stock, etc. There is a lower market price for Eastern shipments than the regular quotations. Many mills cut the market price from \$2 to \$4 per M., and the disposal of their entire yards at list price would be a God-send. There is not a mill on the Pacific Coast today carrying any material amount of lumber that would not take considerable less than market price to clean out their yards at one sale for cash. The writer knows of an instance a short time ago where a lumber yard containing between 3,000,000 and 4,000,000 feet of lumber was sold in one sum for cash at \$2 less per M. than the recognized market price for carload lots.

It would be fair to the claimant to make deductions somewhat similar to the following:

When market price, F. O. B. mill, carload lot, is..	\$12.00
Deduct for loading	\$.30
Deduct for traveling salesman.....	.50
Deduct for cash discounts, 3 per cent.....	.36
Deduct for depreciation, 2½ per cent.....	.30
Deduct for difference in price between carload lots and large quantities.....	1.00
	<u>\$ 2.46</u>
Actual cash value, net to owner.....	<u>\$ 9.54</u>

Who makes the prices, and how they are made, have no place in this paper, although it is an interesting subject and might be studied with profit.

"CO-OPERATION."

Arthur M. Brown.

In a territory of the area of that covered by the Pacific Coast departments of the larger number of the companies doing business here, with the distances between the various important points, the areas which must, necessarily, be covered by the greater number of special agents, the diversity of interests and more especially the radically different ideas of management which prevail, co-operation cannot appeal as it does in the more closely united and more thoroughly allied fields of operation throughout the Eastern States and the Middle West, except, perhaps, in the one particular of rate-making. At the same time, co-operation is so thoroughly necessary in all the details of our every day life and so closely allied to all that is good in our well-being that the subject is one which must appeal to those who have the welfare of our insurance interests at heart, and I feel that I can speak more freely on the subject than could have been done a few years since when through force of circumstances, individuality and individual methods were more essential than at the present time, or, if not at the present time, at least will be in the very near future. At that time the evils of adverse legislation, of excessive and unwarranted taxation and of illegal competition were not as paramount as at present, but times change and men change with them, and I cannot but feel that the time is rapidly approaching when co-operation, not only in rate-making but in all the details which surround our interests, is essentially necessary if we are to continue the insurance interests on this Coast on the highly successful plane which has characterized them for many years past. As has been aptly said, within recent years the Pacific Coast has been the one green oasis in the desert of insurance waste in the United States; a high standard has been set and it is to our interests to so co-operate as to continue this standard of excellency.

This organization is essentially one of special agents. The managers who have the honor of being members attained that membership largely while they were active workers in the field at large, but the foundation of the Association is, must be and must continue to be the great body of the bread winners of the profession, and it is to the special agents that the idea of co-operation in all the details of the profession should most strongly appeal. The class of men occupying that position is, of necessity, as the world advances, of a higher grade than formerly, higher intelligence, better in social standing and more thoroughly educated in the details of the profession, and co-operation has begun

(and I say "begun" advisedly) to set its mark, more especially in the Northwest field, where the Northwest Association is showing its good effects; but this co-operation has been so comparatively limited in its scope as to leave every room for advancement and improvement as the growth of the population and industries increases.

It is perhaps unfortunate for co-operation on this Coast that, until recently, the population of the greater part of the territory has been sparse, that the towns capable of supporting individual insurance agents have been but few, and that as a result of the keen competition for business the insurance agents in the smaller places have been recruited from all classes of business—merchants, hotel men, blacksmiths, barbers, millmen and farmers—and not only these, but men of no character or standing, in fact some who have been actually criminal, have been selected to act and stand for interests representing millions of dollars. Men who have made failures in every other line of business have been able, without difficulty, to secure representation of the best companies, and the outcome has been that in place of fire insurance being looked upon as a profession it has developed, unfortunately, at many points into a scramble for premiums without regard to whom, from or whence they come. Just so surely, however, as the personnel of special agents is improving, just so surely as the successful special agent must be one who has been educated in and devoted his entire life and study to the profession, so must the class of agents as the Pacific Coast grows become better and more specialized in the business. "Specialty" is rapidly becoming the watch-word of every other business throughout the world. The most successful men are turning their ideas to special features of their chosen business, and the insurance profession should not fall behind in this march of progress. We need, and will have in time, as our local representatives men who will devote their time, or the greater part of their time, to the specialty of insurance, and we cannot too soon co-operate in forcing this issue and in endeavoring to set local fire insurance representation on as high a plane as that of any other business. Take, for instance, two States, one Montana, in our own jurisdiction, the other Colorado, just over the border line, and note the difference between the great majority of the agents in those States and those who represent the insurance business in many of the other portions of our field. In those States the agents, for the greater part are men of high standing in their own communities, men who devote their interests, largely, to the insurance profession and who not only control the immediate business of their cities, but have, as should be the case, business of the surrounding small towns and villages. They have co-operated to bring about this most desirable situation,

for the company which goes outside at any one point in that State to choose for its representatives men who are seeking practically to derive a rebate on their own business is quickly brought to learn that it cannot continue with any degree of success in the other portions of the State. If we will get together and as time progresses insist that the same condition of affairs must prevail throughout our entire territory, co-operation will have done much toward again bringing into general respects the fire insurance profession.

In the adjustment of losses co-operation should be the first consideration, and yet, I regret to say, it is not looked upon with the favor that it, undoubtedly, deserves. How often do we see in a loss involving tens of thousands of dollars one or two managers holding out against the desires of the balance for one or two adjusters because there may happen to be at a nearby point one of their own men, or for reason that they may have some personal grievance against the adjuster chosen, with the result that half a dozen or more adjusters are chosen when one would suffice, the expense proportionately increased and the loss not as well settled as it would have been under one guiding hand.

It is cited that at a recent loss which occurred, an opportunity was had to dispose of the stock at a very good figure, but was prevented for the reason that one company having but a small proportion of the total insurance had not only refused to accept the adjuster chosen, but had in some way neglected to send a representative. The result was an almost total loss to all of the companies, where a handsome salvage could have been obtained. On the other hand, we see the well laid plans of an adjuster completely upset because some manager has gotten the idea that the loss is being unnecessarily delayed and the expense piled up, the outcome, necessarily, being that under his instructions the adjuster is forced to hurry the settlement, to save expenses it is true, but, in many instances, to materially increase the loss cost to his companies; or, again, some pet local agent is chosen to represent his company on a loss where a number of companies are interested and where the damage may increase or decrease according to the indications of the future placing of the line, with the inevitable result that the other managers endeavor to "play even" in future cases. I believe that the secret of co-operation in adjustments lies in the establishment here of Adjusting Bureaus, similar to those existing in the East and Middle West, but until that plan is adopted we can co-operate to bring about a better condition of affairs in loss adjustments, a condition which will result in losses being adjusted and not, as at present, on too many unfortunate occasions, in adjustments being "slopped over" in order that companies may obtain the rather dubious reputation of making prompt settlements.

There is another feature of co-operation and that in connection with the Board of Fire Underwriters of the Pacific, which I rather hesitate to touch upon, feeling that my ideas may be radically different from those of the majority, but it seems inevitable that with the growth of this territory we cannot hope to continue the management of all of the details of Board affairs entirely from San Francisco. Not but that the present machinery for rate-making is admirable, but with the betterment of class and intelligence among local agents the details of their needs and of local conditions will become so vast and diversified as to necessitate local government. It is with this idea that the plan of establishing, at all points where the Board of Fire Underwriters has branch offices, Advisory and Co-operative Boards of Resident Special Agents seem feasible, not only feasible, but necessary. Special agents must necessarily, through the very nature of their work, personal acquaintance with an intimate knowledge of the business of local agents, become more thoroughly acquainted with and gain a greater insight into the local conditions governing than can possibly be had by one, no matter how clever in his work, who is called to certain localities on given occasions only. Special agents gain knowledge which could not be used in a general way, but which would be invaluable in some local committee work, and, if properly chosen, such committees could accomplish a great amount of good in their advisory capacity. These advisory committees could co-operate more successfully with the agents and with the local Board managers in the government of details within their own territory and could more successfully and compatibly hold all interests together than could be expected of a sole governing body comparatively remote from the scene of action. It is a plan which, if successful, would do more to hold conditions in case of anti-compact legislation in a given territory than all the individual action possible, and is one, I believe worthy of every consideration.

But the paramount feature of co-operation is kindly fellow feeling. Don't "knock." Someone has said that if he were permitted to stand on a busy street, pointing and looking upwards, he could, within half an hour, attract a crowd which would completely stop all traffic and that within the next hour rumors of the greatest disaster would be spread over a city. So it is with the head shake, the little innuendo and the hasty word, which though of but little meaning in itself increases in marvelous proportions as it passes from lip to lip until to the astoundment of its originator it casts a blackening shadow on some associate or on some company, which will take months of patient effort to eradicate. In nearly all Japanese households you will find three figures of apes in various positions, signifying "Hear no,

see no, speak no evil," and surely our profession will be better if we can co-operate in that beautiful idea. If it can be said among and about the insurance profession of the Pacific Coast that characters of its members are safe from detraction so long as they commit no actual wrong, then surely will co-operation have brought forth its best issue.

A FEW SUGGESTIONS.

V. Carus Driffield.

I had entirely overlooked my promise to our President to contribute a paper for this meeting until I received a notice from the Secretary informing me of the date thereof, whereupon I endeavored to "beg off" but without success. My excuses, to the effect that I was busily engaged in annual statement work and in the planting of a new company in the field, were rejected by Mr. Thornton as entirely insufficient, and I was given to understand by him that ties of long and close friendship demanded the fulfillment of my obligations.

Not having the opportunity of seriously considering the selection of a subject which would permit of elaboration and which might prove of interest I pursued the only course available under the circumstances, and upon being requested to give the title of my paper I selected the one in question—"A Few Suggestions"—as being entirely indefinite and as affording me the opportunity of dealing lightly, and in a general way, with several subjects, without necessitating any considerable concentration of thought upon one particular topic.

I will proceed to give you the few suggestions I have to offer, which will be presented barely, and without much argument in their favor, but which I believe are worthy of some consideration at your hand.

TO ADJUSTERS:

ORIGIN OF FIRE: In my examination of proofs of loss I have been impressed with the fact that the origin of fire is rarely definitely and satisfactorily stated therein. "Cause unknown," and speculative theories, such as "spontaneous combustion," "defective wiring," "rats and matches," "supposed incendiary," are very frequently advanced as being responsible for the fire. I fully appreciate the fact that in a great majority of cases the origin of a fire can be determined only through information obtained, frequently from interested parties, and that same is occasionally, necessarily, a matter of speculation, but I am convinced that, while the ascertainment of sound value and loss or damage is usually the subject of careful and capable investigation at the hands of the adjuster, the mere fact that the loss, upon its face, appears to be an honest one is generally considered as being sufficient warrant for the acceptance of the statement of the assured as to the origin of the fire. And I am as fully convinced that, if as thorough investigation were had in regard to origin of fire as to the resultant loss therefrom the

stereotyped reported causes such as "spontaneous combustion," "defective wiring," etc., would be considerably lessened and the origin more frequently accurately ascertained. Such suggested close investigation might possibly reveal the fact that, despite the outward appearance of accidental origin, the fire was, unquestionably, the result of premeditation.

I urge upon all adjusters the necessity of a close investigation into the origin of fires, and moreover, I am of the opinion that a classification of losses by causes would prove of almost equal value to the fraternity as the classification of losses by hazards.

APPORTIONMENT OF LOSSES: The well known Kinne rule was, more than twenty years ago, adopted by this Association as the method to be used in the apportionment of losses under non-concurrent policies. Such adoption did not however carry with it the acceptance thereof by the companies. I have always considered the Kinne rule a fair and equitable one, but there are some managers who,—not entirely without reason—believe that a company writing a general policy should be penalized as against one writing specifically, and furthermore the rule is not applicable in all cases. The apportionment of losses under non-concurrent policies has been the subject of litigation and arbitration between companies and the consensus of the legal decisions seems to favor the application of the old "Fox Rule," which reads as follows: "If the loss upon any item or items jointly covered be less than the total amount of unexhausted general and specific insurance thereon, then unexhausted general insurance must contribute with specific on each loss jointly covered in proportion as each specific loss shall bear to the sum of the specific losses jointly covered."

My suggestion to the adjuster who is dealing with a loss under non-concurrent policies is that he should satisfy himself with ascertaining the sound values of, and loss or damage to each item involved and report accordingly to the companies in interest, leaving it to them to come to an agreement as to the method of apportionment to be used, which is not arbitrary or determined by the contract. In making an adjustment of the loss he will have fulfilled his duty and by the adoption of my suggestion he will avoid possible criticism.

TO MANAGERS:

AGENCY CREDITS: One of the pin-pricks in our business is the credit taken in agency accounts current designated "Postage and Exchange." A charge under such item entirely disproportionate to the net amount of income therein reported is ques-

tioned and provisionally disallowed only to be met with a response from the local agent to the effect that his other companies take no exception to his charges in such regard, and that it is his "custom" to charge a fixed percentage upon either the gross or net amount of his account,—usually the former. We are all aware of the abuses in this connection, and I suggest that no time should be lost in remedying the evil—by agreement, or preferably by means of Board legislation.

MANUFACTURERS' INDEMNITY: In former days, prior to the general adoption of the N. Y. Standard form of policy, our contracts contained the "Manufacturers' Clause" which limited the liability of the companies to the actual cost of production,—now-a-days, the measure of damage is generally "the actual cash value of the property damaged or destroyed at the time and at the location of the fire." From the point of indemnity what is the "actual value,"—the cost of production, or the price which the commodity would command in open market? This is no new question and has been debated pro and con, and has been the subject of consideration by the courts. In order to avoid any controversy in regard thereto I would suggest that our policies covering products such as hops, raisins, fruit, wine, flour, sugar, lumber, shingles and like commodities should bear a three-fourths value clause—not the one in vogue, but one which would limit the liability of the company to three-fourths of the amount which could have been realized upon the property damaged or destroyed at the time and location of the fire and which should be equally as operative in the cases of partial as in those of total losses. Our recent experiences in Fresno, in regard to raisins and dried fruit, and in Rocky Ford, Colo., in regard to sugar, should assist us in concluding as to the wisdom or otherwise of the adoption of the suggestion offered.

CO-INSURANCE: I am at a loss to understand the apathy on the part of the Coast representatives of companies in regard to the requirement of a co-insurance clause in our contracts. Hardly a single day passes that one, at least, of us is not forcibly brought to a realization of the fact that his acceptance of a risk was predicated upon false premises. "Insurance carried" to "value involved" is unfortunately almost invariably an unknown quantity, and the premium rates are consequently very frequently inconsistent. I strongly urge the adoption of a mandatory fifty per cent co-insurance clause upon all policies covering property in the protected cities, and a substantial percentage reduction in rate for co-insurance in excess of that which I suggest should be obligatory.

NON-BOARD COMPETITION: I had contemplated enlarging to some extent upon this subject, but, remembering that this

Association is non-sectarian and that the membership thereof is composed of both "ins and outs" I have concluded that the proper place to air my views in such regard is upon the floor of the Board rooms. I cannot, however, refrain from expressing my opinion that our present means of competition with the non-board element are ineffective and that we need much greater latitude in such regard than is at present afforded us. The non-board contingent is growing, and while we "hold the bag" they will prosper and multiply. How to meet the situation is one of the issues of the day, and in regard thereto I have no suggestion to make, except that our ratings be consistently made. The questions of the payment of "graded commission," with or without separation, and of the writing of long-term policies upon mercantile buildings, as competitive measures, are being considered by the Board and little can be gained by the discussion of such subjects in this paper.

I would, however, ask the "Specials" present to inform their managers as to the opinion of their local agents in regard thereto, and also in regard to the advisability of the continuance of the present method of writing "in course of construction" policies. I have yet to find an agent who expresses himself in favor of this method, and I fail to perceive the logic of granting an assured indemnity, without cost, upon a building in course of construction and subject to extraordinary hazards,—of carpenter, plumber, tinner, etc.,—upon the understanding,—not always fulfilled,—that, upon completion, the premises will be insured with the company and an adequate rate paid for such prolonged indemnity.

My concluding suggestions to managers is to the effect that the proceedings of this Association are entitled to, and should, be taken more seriously than has hitherto been the case. During the term of my membership,—which exceeds a period of twenty-years,—I have heard almost every topic incident to our business discussed and threshed out upon the floor of our meeting-room,—papers which evidenced originality, careful thought, and capability in the handling of the subject have been presented for our benefit, and yet it has rarely been the case that our deliberations have resulted in the adoption of approved methods, either by way of agreement between the companies or through the means of Board legislation. The trouble in this regard appears to be that after our meetings are over, the special agents,—the active members,—disperse to their respective places of abode, and the managers, in the stress of business engagements, lose sight of proposed measures,—the adoption whereof might prove of incalculable benefit to the interest of our business. And thus it is that from year to year the seed planted through the medium of these meetings fails to germinate.

A Reinsurance Agreement between companies, originating in a suggestion conveyed in a paper read before the Association, will probably become effective in the near future, and constitutes an example of what it is possible to accomplish through the medium of our annual conferences. I suggest that upon the presentation of the views of a member as to the adoption of measures which, after deliberation, are conceded to afford a probability of material benefit to our mutual interests, such proposed measures should be referred to a committee, composed of, say, five managers (members of this Association), with a request that the subject matter thereof be given their earnest and prompt attention, and that their recommendations in regard thereto should be conveyed to the Executive Committee of the Board for action in the premises.

TO THE INCOMING PRESIDENT:

I would advise the exploitation of new material in his selection of contributors to the proceedings of our next annual meeting. Apart from the fact that we have a large number of what we might call younger members of the Association, who have already demonstrated their capacity in the positions occupied by them and who have not, as yet, made their debut under our auspices, we have many older members who, either through indifference, diffidence, or want of opportunity have not hitherto given us the benefit of their views upon the occasion of these gatherings. These should be made to "come to time." It is hardly fair to expect the "Old Guard" to continuously stand the brunt of providing the material for our deliberations. Furthermore, I am strongly of the belief that the neophytes who can be induced to actively participate in our proceedings will furnish pabulum which will prove neither dull, stale nor unprofitable.

THE CONFLAGRATION HAZARD AND CO-INSURANCE.

A. W. Whitney.

My purpose in this paper is to show how the relative rates for co-insurance, derived from an experience of normal loss, should be modified if one desires to take account of the conflagration hazard. But before doing this, I beg to be allowed to speak in general of the conflagration hazard.

Insurance is an institution for the elimination of uncertainty. Uncertainty paralyzes business, certainty, accordingly, is desirable and may be purchased like many other desirable things. Insurance is the opposite of gambling, for gambling introduces uncertainty where it did not before exist. However, when the insured buys certainty he gives up uncertainty so that the transaction for the insurer is a gamble. While this is unquestionably true for one individual transaction, for ten thousand such transactions the working of the law of averages gives practical certainty. And so both parties attain certainty one by buying it outright, the other by carrying on a sufficiently great number of such transactions to obtain the natural stability that comes with large numbers. **No plan of insurance can be stable and genuine which does not afford certainty to both parties.**

The insurance company may be looked upon as an agency which brings the insured into contact with each other distributing the losses and at the same time receiving for this valuable office a remuneration sufficient to pay the expense of the business and to afford a reasonable profit. **This mass of the insured** is an absolutely necessary element in any sound plan of insurance.

In ordinary types of insurance the payments are made before the losses occur. This necessitates the fixing of a rate to meet the hazard. But what is this subtle element, the hazard, and how is its value to be ascertained? Two ways are conceivable. One is to depend upon the law of averages again and to say: "As things have happened in the past so will they happen in the future; the future hazard is the past hazard; look for it to your records of loss." The other way is by an enumeration and valuation of the elements of the hazard. Some ideally simple case is conceivable in which this latter method might be by itself effective although in general it is useful only in connection with the statistical method. If it were the pleasant custom somewhere to shoot up the place and tip the lamps over when one got, we will say, a straight flush, the fact that there are 3 chances out of 216,580 of such an event for each player on every deal would give one a priori line on the hazard without waiting for the experience. I am willing to admit, however, that as

this does not take account of the possibility of having cards up one's sleeves, even here the statistical method would have its advantages.

In general, the statistical method may be used to give bench-marks, absolute values, while the other method may be used to put in the shadings. This I take to be the theory underlying the construction of a mercantile schedule. The main facts are the result of actual statistical investigation. Differentiation among risks, however, is largely a matter of analysis and judgment. For instance, the hazard of an average brick mercantile building is known from statistics; the charge for vertical openings or the allowance for fire-extinguishing devices are arrived at by analysis and judgment.

Now let me once more emphasize the fact that it is absolutely essential for the working of insurance that there should be a mass of the insured giving enough losses to afford a proper working of the law of averages. This is necessary for two reasons: first, to make the business itself stable; second, to make the result of past experience trustworthy as a measure of the future hazard.

Now, so far as ordinary normal loss is concerned, the city of San Francisco, for instance, would furnish a sufficient mass of the insured to afford this desired degree of stability, particularly if the working of it were taken over a period of several years.

However, besides ordinary fires there are extraordinary fires, fires that cannot be confined to one or two buildings or even a block, but that sweep over large portions of a city; namely, conflagrations.

These are of such an exceptional nature that they cannot be looked to to give an average with the normal losses; they may just as well be treated in a class by themselves.

But what in this case is the mass of the insured? Surely not the people of San Francisco, nor of Chicago, nor of New York. We must widen the bounds till we have taken in all the cities that are exposed to a conflagration hazard of the magnitude that we are considering. Furthermore, we must consider a long period of years. So, while for the ordinary hazard we may consider the mass of the insured to be the insured of San Francisco during a short term of years, for the conflagration hazard, we must consider the mass of the insured to be the insured in all cities subject to such conflagration losses during a very long period of years.

But even all the large cities of the United States over a period of say fifty years afford an experience of only three conflagrations, quite insufficient to allow for the proper working of the law of averages which is a necessary condition for a true plan

of insurance. We are therefore, forced to the conclusion that there is no such thing as perfect insurance against conflagrations. That there may not be another conflagration for 50 years and yet tomorrow there may be a fire in New York City that will bankrupt every company. Well, then, what is to be done; call a conflagration an act of God and refuse to consider it a subject for insurance just as in such cases common carriers disclaim responsibility?

Evidently not! I take it to be an axiom of the science of insurance that whatever experience is obtainable should be used and used in the best possible way; complete information is never obtainable; if it were there would be no need for insurance.

In the case of the conflagration hazard may you not then go before your customers and say: "In the nature of things a conflagration is an event which is beyond the field in which insurance can give complete protection; complete protection, yes, but we propose to protect you to this extent: We will use the experience of the past, insufficient as it is to give a really adequate average, in order to arrive at a measure of the conflagration hazard. This we will assess to you as part of your rate; the proceeds we shall keep as a conflagration fund. We shall thus be able to give you protection up to the measure of past experience. This is fair, is it not?"

It ought to be possible for the insured to know what he is buying; whether he is paying a conflagration charge and whether this is being properly put into a conflagration fund. If he insures with a company that is putting nothing into surplus, he should understand that he is not buying protection against a conflagration, not from anything in the contract, but from simple inability on the part of the company to meet a conflagration loss.

It often happens in insurance that a man is really getting far less than he supposes. Most men who have insured in assessment orders have supposed they were paying for whole-life insurance. When the society runs its course and the rates increase till they are prohibitive, the survivors realize that it was only term insurance that they were getting.

In this connection, then, there are two important things to know: first, whether the rate includes the conflagration charge, second, whether, if it does, the insurer is living up to his responsibility in placing the proceeds in the surplus and keeping them there.

If, now, we consider a plan of insurance which contemplates protection against conflagration, it is important that the conflagration charge should be assessed where it belongs, distributed namely according to the conflagration hazard. No part of it should be assessed to the country, nor to villages or small cities.

So much of this has been very general and, of course, correspondingly easy to talk about. It is not so easy, however, to say just what the conflagration charge should be and just how it should be distributed. Mr. Mullins seems to have outlined the correct method for ascertaining the conflagration charge in the recent report of the co-insurance committee. Mr. Mullins proposes to use for what I have called the mass of the insured, the insured during the last 50 years in the cities of the United States that in 1900 had a population of over 200,000. Over these are to be assessed for the purpose of arriving at the conflagration hazard the insurance loss in the Boston, Chicago and Baltimore conflagrations. This, according to Mr. Mullins' figures, was about 180 millions of dollars; the computed premium income during this time was about 1026 millions of dollars. Thus about 17½ per cent of the premium income went to pay conflagration losses.

If, now, we knew the amount of insurance in force during this period, taking as unit an insurance of \$1 for 1 year, by dividing the conflagration loss by this amount of insurance in force, we should obtain the burning ratio as regards conflagrations. This would give that part of the rate that is designed to meet the conflagration loss.

Two assumptions need to be pointed out. One is an implicit assumption made in dividing the conflagration loss by the entire amount of insurance in force that the conflagration hazard is the same for all classes and over all parts of a city. As the greater part of the values is concentrated in the recognized conflagration district and as the conflagration hazard undoubtedly affects to some degree even the residence part of a city, this is not such a violent assumption. If it were desirable, however, to make an attempt to get nearer to the truth, we might divide the conflagration loss not by the entire insurance in force, but simply by that part that covers the conflagration area, or by a more elaborate system of weighting, using our judgment as to the relative conflagration hazard of different parts of the city, we could obtain a conflagration burning ratio for each part of the city separately.

Leaving location out of account, the assumption that the conflagration hazard is the same for all classes is undoubtedly sound, unless possibly in the case of modern fire-proof construction, for in the case of a conflagration all losses are normally total and it makes no difference whether the property at stake is a brick or frame building or the contents thereof.

[The Baltimore fire showed on fire-proof buildings I believe about a 60 per cent ratio of property loss to value, but unless I am mistaken, a total insurance loss.]

Now, as a matter of fact, I do not know whether the

amount of insurance in force in these nineteen cities during the period under consideration is obtainable or not, but it certainly is not at hand, but in lieu of it we might proceed to calculate the conflagration charge in San Francisco separately, where we can perhaps estimate somewhat nearly the amount of insurance in force. We found that over these nineteen cities the conflagration loss in the last 50 years was about 180 millions of dollars, or $17\frac{1}{2}$ per cent of the premium income. It is not quite legitimate to assume that this average applies to each city separately, because of the variation of rates among the different cities, but when one considers that if the rates in one city are higher than in another it is partly, at least, due to a recognition of the greater conflagration hazard, we seem warranted, for instance in San Francisco, in saying that $17\frac{1}{2}$ per cent of the premium income measures the conflagration charge. Assuming the annual premium income of San Francisco to be roughly \$3,000,000, this would make \$525,000 which is collected annually in San Francisco as an estimate of the amount needed to meet the conflagration hazard.

I will assume that the insurance in force in the city is 260 millions. Distributing \$525,000 conflagration charge over 260 millions of insurance would give a conflagration rate of about twenty cents. That is to say, assuming that the rates in San Francisco are just adequate to provide for normal loss, conflagration loss, expense and normal profit, twenty cents out of the rate on every class goes to pay the cost of anticipated conflagration. For instance, supposing the rate on a fire-proof building to be forty cents, twenty cents of this goes to meet the conflagration hazard, forty per cent of it, say, or sixteen cents for expense and profit and the remainder, or four cents, for the normal hazard. According to this analysis then the conflagration hazard in fireproof buildings is recognized to be five times as great as the ordinary hazard.

On stocks of merchandise in brick buildings, if we assume a rate of one dollar, the analysis comes out as follows: forty cents to meet ordinary losses, twenty cents to meet conflagration losses, forty cents for expense and profit; that is, the conflagration burning-ratio on the contents of brick mercantile buildings is half as great as the ordinary burning-ratio.

[The ordinary burning-ratio, if the data were obtainable, might much better be determined directly from the insurance loss and the insurance in force on the class.]

I still have not come to the subject of co-insurance, but this is now very easily disposed of. Since co-insurance is of no effect in the case of total losses and since we are assuming that in a conflagration all losses are total, the conflagration rate of twenty cents should be a part of each of the co-insurance rates

as well as of the ordinary rate. Taking as an example stocks in brick mercantile buildings and remembering that the conflagration burning-ratio in this case is half as great as the burning-ratio due to normal losses, we should increase each of the relative co-insurance rates as given in the report of the Co-insurance Committee (in which only normal loss was considered), by one-half of the corresponding relative ordinary rate. Without going into details, this, when reduced to percentages of the 70 per cent rate, would give the following table.

[See Table 17, Report of the Co-insurance Committee to the Board of Fire Underwriters of the Pacific, September 1905.]

RELATIVE CO-INSURANCE RATES ON CONTENTS OF BRICK BUSINESS BUILDINGS.

Ratio of insurance to value.	Relative rates not including the conflagration charge.	Relative rates including the conflagration charge.
10 per cent.....	245	198
20 per cent.....	193	163
30 per cent.....	163	143
40 per cent.....	142	128
50 per cent.....	125	117
60 per cent.....	111	108
70 per cent.....	100	100
80 per cent.....	90.1	93.3
90 per cent.....	81.5	87.5
100 per cent.....	74	82.4

I beg you to bear in mind, however, that the actual figures arrived at in this paper are of no great account; the work was done hurriedly without access to desirable data.

Mr. Mullins has referred to the fact that the offer of favorable co-insurance reductions would probably lead to a larger average ratio of insurance to value and that if the rates not loaded for conflagration hazard were used, this would lead to greater liability in case of a conflagration with inadequate increase of premiums; with the loaded rates, however, the business would take care of itself, whatever the ratio of insurance to value.

REPORT OF THE COMMITTEE ON THE INSURANCE
INSTITUTE.

Herbert Folger.

The special committee appointed in January, 1905, to give effect to the recommendations of President Fuller in the matter in Insurance Institute, begs leave to present the following report:

The possibilities in this direction were first drawn to our attention in 1893, when the Library Committee made an effort to secure the printed transaction of Insurance Institutes in Great Britain and elsewhere, but it was not until the year 1898 that practical use was made of this material. President Weimann, in his annual address, then urged that either a regular course of instruction should be provided for insurance clerks or that lectures on subjects of direct interest to the business should be arranged for, reports of such lectures to be included as a part of the annual proceedings of our Association. The suggestion, however, met with the fate of many others which had been made by presidents in the past in the absence of a resolution to give effect to it or the appointment of a committee to report.

In his annual address in 1905 President J. L. Fuller devoted considerable time to institute work and urged that an institute be founded here without waiting for action by kindred associations. The committee appointed to consider the address recommended that a special committee be appointed to take into consideration the whole question of institute work and to report (the result) at the next annual meeting; and it was suggested that the co-operation of professors in the University of California be invited.

The report having been adopted, the President appointed as such special committee Messrs. Herbert Folger, Whitney Palache, F. B. Kellam, F. J. A. Mayer and A. W. Thornton; and under the instructions of the Association the retiring President, Mr. J. L. Fuller, was added to the committee.

Your committee discovered early that much time could be given to the consideration of ways and means or even the preparation of an elaborate syllabus; but that if the matter was allowed to drag along by deferring report until the next annual meeting and the possible appointment of another committee, the success of the scheme would be problematical and it might share the fate of so many other good suggestions which have been allowed to drop in the lapse of time. Therefore, the committee formed its plan early in the year and was assisted at the outset by the co-operating committee appointed by the President of the University of California, consisting of Chas. C. Plehn, A. W. Whitney and C. L. Cory. A syllabus was prepared cov-

ering the entire field of practical fire insurance, with the exception of the settlement of losses to be dealt with in ten lectures beginning in October, and the preliminary announcement was made in June. It was the belief of the committee that it could not safely expect an attendance of more than twenty-five to forty junior members, say an average of thirty; but the responses received in June from the few offices consulted at the outset were so hearty that it was soon found that a more sanguine view of the case could safely be taken. After several meetings of the committee, the syllabus, as finally revised, was printed and circulated to all the offices on September 22d, and a preliminary meeting was called for the evening of September 27th. On this occasion ninety-two were present, and the committee had more reason to fear that it would be unable to accommodate the applicants for membership than the lectures would lack support.

The lectures proper began October 4th, and a list of subjects and the speakers presenting them is given hereunder. The attendance at these lectures, according to the record, was as follows:

Lecture No. 1, 102; No. 2, 107; No. 3, 109; No. 4, 112; No. 5, 109; No. 6, 142; No. 7, 118; No. 8, 105; No. 9, 111; No. 10, 98; Total, 1113.

This represents an average of 111, which is most gratifying. It appears that further than 42 of the members did not miss a single lecture; and that thirty-five more were present on every occasion but one. Practically, seventy-five, therefore, may be said to have given their attention to the entire course, and the institute throughout was all that could be desired.

A—The Policy.

October 4—Printed conditions of the New York Standard Policy. Mr. Benj. J. Smith, Manager Connecticut Fire Insurance Co.

October 11—The Written Portion of the Policy; Description of the Risk. Mr. Wm. Sexton, General Adjuster Fireman's Fund Insurance Co.

October 18—The Written Portion of the Policy; Qualifying Clauses, Endorsements, etc. Mr. R. W. Osborn, Manager Pennsylvania Fire Insurance Co.

B—The Fire Hazard.

October 25—Chemistry, as Related to Fire Insurance. Prof. Edmond O'Neill, College of Chemistry, University of California.

November 1—The Hazard of a Mercantile Building and its Contents; Causes of Fire. Mr. R. W. Roberts, Inspector, Fire Underwriters' Inspection Bureau, Portland.

November 8—Electricity, as Related to Fire Insurance. Prof. C. L. Cory, University of California.

November 15—The Hazard of a Mercantile Building and its Contents; Effect of Fire. Mr. Wm. Maris, Adjuster, Royal Insurance Co.

November 22—Maps and Diagrams. Mr. F. E. Berier, Manager Sanborn Map Company.

C—The Rate.

November 29—Rate Book No. 4. Mr. George W. Dornin, Assistant Manager, National and Springfield Fire Insurance Companies.

December 6—The Schedule of the Board of Fire Underwriters of the Pacific. Mr. W. S. Duval, Manager Dist. "B."

Doubt was expressed in the beginning as to the expediency of holding meetings weekly, but experience has shown that the interest was sustained throughout the course and that the regularity of the lectures tended to keep the attendance up to the desired level.

The committee had intended to send out a second circular to be addressed to the members of the Fire Underwriters' Association of the Pacific, urging them to attend the lectures whether they were active or associate members; but upon discovering that the attendance promised to exceed one hundred the committee recognized that the assembly room of the Board, which had been generously placed at our disposal by the Executive Committee of that organization, would not accommodate any larger number than the voluntary members of the Insurance Institute. Accordingly no second circular was issued, neither was there any effort made directly or indirectly to secure attendance of the clerks in several offices which failed to respond to our general circular in June. It is to be regretted that a larger number did not share in the benefit derived from the work of the institute, but on the other hand the committee feels that it may safely say that the attendance was made up of the very best class of young men in the insurance business in San Francisco, including not only those in responsible positions, but also many who have been employed for only one or two years.

The original project included a suggestion that examinations should be held in December for such members of the institute as might present themselves, based upon the subject dealt with in the lectures, but it became apparent after the first lec-

ture that it would be impracticable to ask the students to be presented in a sufficiency thorough manner to pass an examination. Therefore, the committee abandoned this idea and contented itself with endeavoring to have the subjects presented in a broad manner so that the students might, by the end of the course, gain a good general idea of some of the important questions affecting our business.

The work of the institute has given a great impetus to the interest in the use of our library, and the committee in charge thereof will present a report showing the attendance and the need of keeping up this valuable auxiliary to our work.

The committee was somewhat uncertain in the beginning as to the financial outcome of this experiment, and it exercised some caution in arranging for expenditure. Fortunately the professional experts, who were asked to speak for us, generously gave us their services for a sum which might be termed an honorarium and other expenses, including the purchase of some seventy-five chairs, were not excessive. In fact, after allowing for the probable cost of printing the lectures, which your committee believes should be incorporated with the annual Proceedings of this Association, there remains a surplus sufficient to justify us in reporting that the work of such an institute can be carried on from year to year with every probability that it can be made self-sustaining.

The committee can scarcely speak highly enough of the character of the work done by the lecturers, who found it difficult in several instances to deal with the broad subjects assigned to them in a single evening, but the committee believes, nevertheless, that these gentlemen felt more than repaid for their labor by the interest and enthusiasm shown by their auditors. In reporting the conclusion of its work and asking to be discharged, your committee believes that the Association will endorse the wisdom of its course in undertaking to conduct the institute during the past year instead of reporting how one might be conducted at some future time, and it only remains to offer such suggestions as have occurred to us, based upon the experience of 1905.

It would be practicable to repeat the course of 1905 with different lectures from year to year, and it is probable that the students would support this action, but it seems better to suggest that the work of the institute in future should be divided into special courses and that more time would be given to a subject of importance than would be possible in one evening. The lectures of 1905 were divided into three general courses: (a) the policy, (b) the fire hazard, and (c) the rate, and we believe that two courses will be all that should be undertaken in

any one year. As a basis for discussion we suggest that in 1906 a new committee be appointed with the recommendation to present two series of lectures, the first dealing with the policy and the second with the fire hazard.

The first course outlined above would be intended more particularly for office men and more opportunity should be given for discussion, and for the presentation of practical examples of problems which are met daily in our business.

The second course dealing with the fire hazard would be suitable more particularly for the special agents who may be in town, and others in the higher positions, together with members of the institute who came from the offices of the Board of Fire Underwriters of the Pacific and the Fire Underwriters' Inspection Bureau. The course might be made to cover a good deal of ground and suggestions might be properly invited from the class of membership mentioned. It should cover not less than four evenings and might easily be extended to six. The lecturer on electricity originally asked for four evenings and it must not be forgotten that the attendance on November 8th, notwithstanding that the lecture was given in one of the buildings at the University of California in Berkeley, was one hundred and forty-two, the largest noticed at any time during the course.

Your committee recognizes that there is a large field which has not yet been touched and which will be entirely proper for the institute to cover, but it seems wiser to proceed gradually and to defer more thorough study of the rate system on the Pacific Coast, of statistics and classification, of adjustments and similar subjects until the institute is older and its membership has been rooted and grounded in the subjects suggested above.

Much will be gained by requiring, within reasonable limits, some preparation by the students for the lectures which they are to attend, and if this be practicable, examinations would be a desirable feature of the work, with the understanding that the institute will issue certificates to such as may pass creditably. The earnestness and interest of the students may be depended upon, but their time during the day is fully occupied and some care will have to be taken not to require more of them than will be reasonable. Request has been made to the committee for an arrangement by which the students may have access to the library during other evenings than those on which lectures are given, but the committee is not able to solve this problem at the present time. It would be practicable to ask students attending such a course as that outlined for 1906, in connection with policy forms, to memorize certain portions of the contract and perhaps a few of the rules constantly referred to in writing policies.

The work already done and that outlined for next year

would be considered crude by many of the institutes abroad; but the conditions under which they work are quite different from those in this country, and the requirement that clerks desiring to fill such position shall be certificated puts the matter on a different plane. It is probable also that the companies have a greater interest in the work than has been shown by a number of the managers and general agents in San Francisco, and that they arrange the time of their employees so that within reasonable limits institute work may be done during the day. We do not consider this feasible here at present.

A vast amount of new material has been added to our library during the last year or two and much valuable information is being published every month. The suggestion made some years ago by one of the library committees might well be carried out now; namely, that a quarterly bulletin be issued showing the titles of new books, pamphlets or papers at the library. In this event in connection with the syllabus of the institute it would be practicable to announce the leading references in the library which could be consulted in connection with each subject.

Your committee might go on at great length with suggestions and recommendations, and could have outlined several more courses which the younger men in the business would be only too glad to have presented. It is believed, however, that we have done wisely in not trying to do too much during the first year, and we think our successors will find it advantageously to proceed with some caution.

In conclusion, we congratulate the Association most heartily upon the result of the work undertaken under its instruction, and the members of this committee, far from considering that thanks are due them for their share in the work, count themselves fortunate in having been permitted to represent the Association in the first year of this undertaking. The time is coming when technical and thorough training for clerks will be a necessity, and the sooner we meet this issue the better it will be for the younger men among our associates and for the honorable business in which we are engaged.

Respectfully submitted,

HERBERT FOLGER,
L. L. FULLER,
F. B. KELLAM,
WHITNEY PALACHE,
A. W. THORNTON,
F. J. ALEX. MAYER,

Committee.

SUGGESTIONS FOR FOUR COURSES.

Course I.

1. Printed conditions N. Y. Standard policy.
2. Printed conditions N. Y. Standard policy.
3. Written portion, including forms prescribed by board tariffs for dwellings, mercantile buildings and contents and non-hazardous risks generally.
4. Written portion for covering special hazards.
5. Endorsements and assignments.
6. Clauses effecting contribution in event of loss such as Average, Co-insurance, Three-fourths Value, etc.
7. Tariff rules and all board circulars dealing with forms of policies.

Course II.

Tariffs and Schedules.

1. Tariff Pages 4 and 5, Fire Hazards, Table of Classification of Hazards, etc.
2. Rules and all board circulars having reference to rating by tariff.
3. (a) Deficiencies and Privileges. (b) Exposures and exposure charges.
4. Mercantile schedules. (a) Key rate of city and standard requirements for protection.
5. Mercantile schedule. (b) Rate of mercantile building and contents and standards of construction and interior protection.
6. Mercantile schedule. (c) Exposure charges and exterior protection.

Course III.

Hazards and Protection.

1. Electricity covering four evenings.
2. Chemistry, including oils and spontaneous combustion.
3. Modern buildings and construction.
4. Modern fire protection.
5. Automatic sprinklers.
6. Saw mill schedule.
7. Schedules for other special hazards.

Course IV.

General.

1. Statistics and classification.
2. History of fire insurance and board organizations.
3. Insurance law, decisions and statutory requirements.
4. Loss adjustments. (a) When policies are concurrent and no disagreement exists.
5. Loss adjustment. (b) Dis agreements and appraisal.
6. Loss adjustments. (c) Apportionment of losses under non-concurrent policies, questions of cash and market value, manufacturers cost, etc.
7. Re-insurance.

THE SPECIAL AGENT.

Miss F. L. Grippen.

Read at the Banquet of the Association, held at the Hotel St. Francis, January 10th, 1906.

He drops in upon us without the least warning,
 The debonair Special so smiling and gay.
 Then right to his tasks—all idleness scorning,
 Talks nothing but business the whole livelong day.
 The O-K-ing Special,
 The cancelling Special,
 The watch-me-work Special who happens this way.

At last every risk has been duly inspected,
 The long-suffering Local breathes freely once more.
 And matters of moment are oft times neglected
 While listening to wonderful stories galore.
 The up-to-date Special,
 The wide awake Special,
 The quite correct Special—he's been there before.

He tells of a "hunch," how it caused him to hurry
 And cancel a risk that his "Boss" had O-K'd.
 When it burned the next day he was all in a flurry,
 His Manager wired him, "your fortune is made."
 The far-seeing Special,
 The mind-reading Special,
 The Sherlock Holmes Special, rare judgment displayed.

When it comes to adjusting, he's there no mistaking,
 No loss is too crooked for him to see through.
 He "scoops" other Specials who sleep while he's waking,
 His claims are back numbers when theirs are yet new.
 The go-ahead Special,
 The quick-witted Special,
 The right-your-are Special, who dawns on my view.

And so, on and on, one after another,
 His tales, grave and gay, at his hearers are tossed.
 Ah, one day the powers that be must discover,
 That a Manager great in this Special is lost.
 The volatile Special,
 The politic Special,
 The argus-eyed Special—he's never a frost.

And last, but not least (it is needless to mention),
The typewriter maiden, so shy, so demure.
On her he's sure always to bestow some attention—
Tho' to make an impression is no sinecure.
The large hearted Special,
"I love you all" Special.
Whose picture to carry, he is never quite sure.

Ah, Sir Special Agent, you're "specially rated,"
All compact officials the risk have approved.
All hazards forgotten—deficiencies slated,
Relief has been granted—query tags all removed.
May ample award, based on appreciation,
Be yours when the final adjustment is made.
No need for appraisal—no depreciation,
When Life's day has ended—Life's last claim been paid.

THE SAN FRANCISCO DISASTER

By J. L. FULLER

On Wednesday, the 18th day of April, 1906, at 5:15 o'clock in the morning, the people of San Francisco and vicinity were suddenly apprised of an earthquake so severe in its action that the true cause of the disturbance was instantly understood. The creaking of walls, the falling of chimney bricks on the roof and the rattling of falling bric-a-brac had the effect of intensifying the awfulness of the occasion and the uncertainty of the outcome. The shock lasted 28 seconds and was followed by intense feelings of relief by all who passed through the experience. Such were the sensations felt in Oakland, where I live, some six miles distant from San Francisco on the opposite of the bay.

Information soon reached Oakland that the City of San Francisco was burning, which had the effect of stimulating travel across the bay to such an extent that I found it difficult to secure passage over the accustomed route, by train and boat, owing to the congested traffic. I finally succeeded in reaching the boat and when the slip was cleared the view of the city, some three miles distant, disclosed to the vision numerous fires burning near the water front and the sight was most appalling. Upon landing I found that the accustomed thoroughfare up Market and California Streets had been cut off by the flames and I sought another route through a back street and, by literally going "between two fires," reached the insurance district at California and Sansome Streets.

The numerous fires, that broke out simultaneously just after the earthquake, were confined almost entirely, if not quite so, to the district of the City located on filled ground lying near the water front, and in the marsh land district of the Mission. Here it was that the greatest loss of life and damage to property occurred. It was in these districts, also, where the water pipes were disjointed through the action of the earthquake, thereby crippling the water system and rendering practically useless San Francisco's able Fire Department. In this connection I must say that the death of the Chief of the Fire Department from injuries sustained by a falling chimney as the result of the shock, was most deplorable in more respects than one. Had he lived to direct the work of the department, even with the limited means at hand, the result might have been vastly different for Chief Sullivan was a man of extraordinary ability as a

fire fighter and was removed by the hand of death when most needed.

Under such unfavorable conditions the flames marched fiendishly on without interference, and about the only hope entertained for checking the conflagration was the blowing up of buildings in the path of the fire and the intervention of favorable winds. The blowing up of the buildings was freely resorted to, but this means of checking the flames accomplished very little during the early and intermediate stages of the conflagration, for the reason that the soldiers of the army, who had this work in hand, did not understand the use and application of explosives. Later on, during the progress of the fire, miners and sappers from the Government Navy Yard, who are well versed in such work, took charge, when better results were attained.

Strong winds from the west are usual on the peninsula and it was hoped that a stiff breeze would spring up to blow the flames backward toward the burned district from whence the fires started, but, unfortunately, an almost dead calm prevailed throughout the whole course of the conflagration. The fires, consequently, burned sluggishly—the flames being drawn skyward; and in many places did not throw out sufficient heat to communicate fire to the adjacent blocks.

About 2 o'clock in the afternoon I went, in company with others, to the roof of the new 14-story "Merchants' Exchange," the most modern office building in the City, located near the corner of California and Montgomery streets. The sight that met my view from this high elevation was, indeed, awe-inspiring and the scene a most spectacular one. Numerous fires were burning toward the east and south. The grand old palace Hotel, of which every true Californian was so proud, was in the clutches of the flames and the sight was a pitiful one to behold. The conflagration was spreading slowly but deliberately and to me it took on the appearance of a vast army in action, sub-divided about in this manner: the Northern division, having its origin in the district north of Market street and east of Sansome street, slowly forging westward through the wholesale and insurance districts, heading for Chinatown and the Latin quarter; the Central division having its origin in the district south of Market street and east of Sixth street, cutting its way through the machine shop and manufacturing section and heading for the Mission; the Southern division having its origin in "Hayes Valley," north of Van Ness avenue, and taking an eastern course toward the City Hall. This division of the conflagration was distinctive from the others for the reason that it was not brought about directly by the earthquake, but was caused by a defective chimney, a few hours later. It originated in Hayes street, between Gough and Octavia streets, and is known as

the "Ham and Eggs" fire. It appears that a careless housewife, having more consideration for her husband's physical welfare than the safety of the neighborhood, started a fire in her stove and cooked the notable ham and eggs which are held to be primarily responsible for the origin of this particular fire, which developed into an important division of the conflagration.

Returning to the scene of the Northern division, it can be safely said that it did not cross Sansome street, which is 80 feet wide, for fully six hours after the earthquake, although fires were burning along the line of this street from the commencement, in fact three or four blocks adjacent thereto had burned beyond the danger point before the flames crossed over to the west side. The conditions were, therefore, most favorable for holding the conflagration in check at this line of defense, which, undoubtedly, could have been accomplished had there been available an ordinary supply of water, but it was not to be had. The flames, therefore, took their own sweet time in which to complete the terrible work of devastation, the extent of which was not even dreamed of as late as the noon hour. Up to this time the feeling was prevalent that the fire would not cross Sansome street, which state of mind is borne out by several incidents of offices having been rented in the district immediately west of the fire line, by those who had been burned out.

The flames first crossed Sansome street near Clay street soon after the noon hour and slowly worked southward toward our position on the "Merchants' Exchange." About 3 o'clock we were compelled to leave the building to avoid the danger from explosives, which were being freely used near by. Soon thereafter this modern building of Class "A" construction was engulfed in the flames and stripped of everything combustible, including the property and records of the Board of Fire Underwriters and the valuable library of the Fire Underwriters' Association of the Pacific, the offices of which were on the fourteenth floor.

About 4 o'clock in the afternoon of that eventful day, being weary and sick at heart, I picked my way around the north wing of the fire to the ferry station to find the boats running and "loaded to the guards" with refugees leaving the stricken city for Oakland. I joined the throng and arrived home in due time, where all night long the lurid light of the conflagration could be seen, and the weird detonations of the dynamite could be distinctly heard.

The next morning, Thursday, I experienced some difficulty in getting back across the bay, but was successful in reaching the burning City about 9 o'clock, when I was enabled to walk from the water front over the burned district as far as Kearny and California Streets.

During the night the Northern division of the conflagration had worked its way westward through the heart of Chinatown as far as Powell street and northward to Pacific street, passing to the left of the Latin quarter which was left unharmed.

I passed around the fire line, going northward over the Chinatown neck of the burned district by way of Kearny street to Broadway. At this time, between 9 and 10 o'clock, the flames were doubling back on the Latin quarter, which district, with the exception of one small block, was soon laid waste.

I went west on Broadway to Jones street, which is the summit of a high ridge extending from Russian Hill to California Street Hill. I then went south on Jones street to its intersection with California street, which point is known as "Nob Hill," and the scene that met my view from this elevated position presented to me what appeared to be the hottest stage of the conflagration.

A diversion is now necessary in order to account for the progress of the fire in other districts: During the night the Central division of the conflagration had about spent its force within the district bounded by Market and Eighth streets, and San Francisco Bay. The Southern division (Hayes Valley fire) having been restrained from working westward by means of a local supply of water, took the opposite course toward Van Ness avenue, and crossed this thoroughfare, 125 feet wide, at Hayes street, where the heat was most intense from the burning of the St. Ignatius church and school buildings.

After crossing Van Ness Avenue, this division of the conflagration, commenced to assume larger proportions by branching out to the northward and southward. The City Hall stood directly in the eastward path of the flames and caught the full force of the heat. This valuable structure had been seriously damaged by the earthquake, and was soon finished by the flames. The fire crossed to the south side of Market street, 120 feet wide, near the City Hall, occasioned by the burning of the Mechanics' Pavilion and St. Nicholas Hotel, both large combustible structures. Having thus scored a second victory in the crossing of wide thoroughfares, this branch of the Hayes Valley fire formed a junction at Eighth street with the Central division, which had its origin south of Market street. The flames then diverged southward through the Mission and proceeded unchecked as far as Twentieth street and westward to Dolores street. Although the Mission buildings were constructed largely of wood, the fire burned slowly and it was not until the night of the day following the earthquake that the conflagration in this quarter was brought under control. This feat was accomplished by making a heroic stand with the aid of a

small local supply of water, combined with the effectual blowing up of buildings.

Returning to the scene of the Northern wing of the Hayes Valley fire, it had burned down the north side of Market street and formed a junction with another fire which started independently of the main conflagration, and had its origin in the Alcazar Theater on O'Farrell street, between Stockton and Powell streets. This fire did not break out until some time during the night of the eighteenth and is said to have been caused by the carelessness of some guards who were using this building for temporary headquarters. Another report was circulated to the effect that the building had been deliberately fired.

The Alcazar fire, thus augmented by the Hayes Valley fire, had, during the early morning of the nineteenth, formed a junction in the vicinity of Union Square with a wing of the Northern division from Chinatown which, during the night, had worked around the base of California Street Hill. Thus reinforced the flames closed in on the hotel and boarding house district in the vicinity of the St. Francis Hotel.

It was at this stage of the conflagration, between 10 and 11 o'clock on the morning of the second day, that I appeared on the scene at California and Jones streets. It fell to my unwilling lot to witness that which had often been predicted—a conflagration in the frame boarding house district of San Francisco, with the Pleasanton Hotel, the largest structure of them all, as the fire breeder. There it was, the prophecy fulfilled, the Pleasanton converted into a roaring furnace, but by no fault of its own, nor of the district to which it belonged.

This line of fire came charging up the hill, destroying the Mark Hopkins Institute of Art, and formed a junction at the summit with the Chinatown fire from the opposite direction. This flanking movement on the Nob Hill buildings was executed by the flames with the same precision that is characteristic of a well disciplined army. This reinforced action seemed necessary to destroy the New Fairmont Hotel and the Flood and Huntington Mansions, for the reason that they were most favorably located, standing in a row, sentinel-like, each in the center of a large block, and having wide streets on all sides. These buildings were in a position, therefore, to withstand any ordinary, single-handed conflagration, but were forced to yield to the cross-fire from the combined forces.

After the Nob Hill engagement, the combined forces, reaching from the summit of California Street Hill to the base of Telegraph Hill, forged on westward and northward through the district composed principally of frame flats and dwellings. At this time, about 11 o'clock a. m., another independent fire

broke out in the vicinity of Hyde and Jackson streets, several blocks in advance of the conflagration line. This fire had its inception in a manner very similar to that of the "Ham and Eggs" fire in Hayes Valley the day before. Another reckless housewife, acting contrary to the admonition of her neighbors and in violation of a strict order of the authorities, started a fire in her cook stove and a defect in the chimney, caused doubtless by the earthquake, did the rest. The blaze soon assumed large proportions and later on joined forces with the main conflagration, which came charging over Jones and California Street Hills.

The fire in this quarter raged all day and night, and it was not until late the next morning (Friday), being the third day of the disaster, that the conflagration was brought under control. This good work was done at Van Ness Avenue, on the west, and at a northern line zig-zagging from Filbert street, at Van Ness, to the foot of Taylor street on the bay. An almost superhuman effort was exerted in a final stand at Van Ness Avenue, which proved successful, otherwise the area of the remainder of the Western addition and of Richmond also would, doubtless, have been added to the present burned district. This satisfactory outcome was due largely to a small supply of water obtained from a local reservoir, as well as water drawn from the bay by relays of fire engines placed on Van Ness Avenue, and used judiciously by the firemen. Explosives were used also, to good purpose, by the Government sappers and miners from Mare Island Navy Yard.

Russian and Telegraph Hills were in the path of the flames from this quarter and were completely surrounded by fire. The dwellers put up a heroic fight against great odds and deserve due credit for saving a few homes on the summit of each hill. The historic home of the deceased author, Robert Louis Stevenson, standing on the pinnacle of Russian Hill, is one among those saved.

The protection afforded the Water Front by fire boats and tugs, saved a great deal of valuable property, consisting principally of the wharves and warehouses and their contents.

The important buildings saved within the burned district are the three Government buildings—Post Office, Mint and Appraisers' building—and that of the California Electrical Works. The former were successfully protected by means of bucket brigades made up of employes and soldiers and marines, working inside the buildings. Water was obtained from wells on the premises, and in the Appraisers' building, wine was brought into requisition to a good purpose.

The saving of the Electrical building was due largely to the protection afforded by wire glass windows, which were put

to a most severe test by the burning of a large frame building only thirty feet distant. This is structurally a Class "C" building, too, and, strange to say, was not seriously damaged by the earthquake, although it will be understood that it is not located within the district of greatest disturbance, which question will be taken up later.

There are practically no new lessons to be learned fire-insurance-wise as a result of this disaster, for the reasons that the experience of other recent conflagrations has only been repeated, it having already been demonstrated that the steel frame and reinforced concrete buildings designated as Class "A," withstood best the ravages of fire. The same now can be said of earthquakes as affecting building construction, for all of such buildings within the burned district withstood both these enemies remarkably well, especially is it the case with those buildings having brick or stone walls supported by the steel frame. As the result of the earthquake it has been determined, also, that the Class "A" building having small floor area, regardless of height, stood the shake better than the building with large floor area, it being a question of flexibility, which is in favor of the smaller building, the larger one being more rigid, thereby offering greater resistance.

It may be safely said that electricity played an important part with regard to the magnitude of this conflagration. Had there been no live wires at the time of the earthquake the number of fires would have been greatly reduced and confined to those originating from the ordinary physical cause, and, therefore, subject to discovery during the stages of incipency. As it was, the greater number of the numerous fires, had their origin in obscure places and were, doubtless, caused by arcs from overcharged wires as the result of the severe disturbance. Furthermore, such fires being located in out of the way places, it was not possible to detect their presence until the flames were beyond control of the crippled Fire Department. This statement is borne out by the established fact of there having been several vault fires caused directly from the stationary electric wires in them. This is a lesson learned at a great expense to those who suffered the loss of valuable records, and should emphasize the wisdom of not wiring vaults.

According to the authentic survey the area of the burned district is 4.11 square miles or 2630 acres, composed of 514 city blocks. About one-third of the populated area of the City was burned over, which, however, represents about two-thirds of the valuation of the property subject to destruction by fire. The total valuation of property destroyed by earthquake and fire is estimated at \$400,000,000, the amount of insurance thereon be-

ing estimated at \$200,000,000. The number of lives lost, as the result of earthquake and fire, is conservatively estimated at 500, and the true number will never be known. The duration of the fire was 72 hours.

One of the important needs of the hour during the trying ordeal was filled by the automobile. With all regular modes of transportation suspended, excepting the use of horses on the outskirts of the City, the automobile was brought into requisition with most excellent results. Flying here and there, around the fire line and over the burned district, carrying messengers, supplies, doctors and nurses, rescuing the sick and injured—such was the mission of the automobile, without the use of which the result, serious as it was, might have been a great deal worse.

The story of this disaster, which is doubtless the greatest of the kind the world has ever known, has been but briefly told, for it would require volumes to record the many incidents of note that occurred during those three eventful days following the earthquake. The question of greatest interest to the outside world at the time, has not been touched upon; the question that overtaxed the wires for days—that overburdened the mails for weeks—the all-important question of human safety. This question has been most satisfactorily answered, with very few exceptions, as is attested by the 200,000 refugees who were made homeless through the agency of earthquake and fire, but whose physical wants were carefully looked after through the efficient relief measures so promptly adopted.

A sympathetic world soon heard of the disaster and anticipating the "needs of the hour," responded with such promptitude and magnanimity in rendering substantial aid, that the debt of gratitude thereby engendered will surely endure far beyond the time when the burned and blackened ruins shall have made way for the new and GREATER SAN FRANCISCO.

Charter Members of the Underwriters' Association of the Pacific.

Organized February 23, 1876

- Bailey, Jas. D., General Agent, Union Insurance Co.
 *Barnes, E. T., General Agent, California Insurance Co.
 Bigelow, H. H., General Agent, Home Mutual Insurance Co.
 Brush, R. G., City Agent, State Investment & Insurance Co.
 *Brown, Edw., General Agent, Faneuil Hall & Locomotive Insurance Cos.
 Bromwell, L. L., Special Agent, Phoenix and Home Insurance Cos.
 *Bryant, A. J., President State Investment & Insurance Co.
 *Callingham, Wm. J., General Agent, Royal Canadian Insurance Co.
 *Clark, Z. P., Agent, German-American Insurance Co.
 Dick, B. C., Agent, Kansas Insurance Co.
 Dickson, Robt., Manager, Imperial, Northern & Queen Insurance Cos.
 *Doolan, Wm., Special Agent, State Investment & Insurance Co.
 Dornin, Geo. D., Secretary, Fireman's Fund Insurance Co.
 *Garniss, J. R., Adjuster.
 Grant, Geo. F., Special Agent, North British & Mercantile Ins. Co.
 *Gunnison, A. R., Special Agent, Commercial Ins. Co. of California.
 *Hart, J. W. Agent, Scottish Commercial Insurance Co.
 *Houghton, J. F. President, Home Mutual Insurance Co.
 Landers, Wm. J., Manager, San Francisco Agency, Guardian Assurance Co.
 *Lowe, B. F., Adjuster.
 Macdonald, William, Surveyor, Board of Fire Underwriters.
 Magill, R. H., General Agent, Home Mutual Insurance Co.
 Potter, E. E., of Potter, Jacobs & Easton, General Agents.
 Sexton, Wm., Special Agent, Fireman's Fund Insurance Co.
 Smith, A. D., General Agent, Northwestern, Amazon & Fairfield Insurance Cos.
 *Smith, Henry, Special Agent, Liverpool & London & Globe Ins. Co.
 Snow, H. W., Special Agent, Commercial Union Assurance Co.
 Spencer, Geo. W., Special Agent, Aetna Insurance Co.
 *Staples, J. W., Adjuster.

*Deceased.

OFFICERS AND COMMITTEES.

List of Officers and Committees of the Fire Underwriters' Association of the Pacific, since organization:

1876	*Benjamin F. Lowe	Henry H. Bigelow	*John W. Staples
1877	George D. Dornin	*Wm. L. Chalmers	*John W. Staples
1878	*Augustus P. Flint	*Edward Brown	*John W. Staples
1879	*Casper T. Hopkins	Andrew D. Smith	*John W. Staples
1880	Geo. W. Spencer	E. W. Carpenter	*John W. Staples
1881	Louis L. Bromwell	Geo. F. Grant	*John W. Staples
1882	George F. Grant	E. W. Carpenter	*John W. Staples
1883	E. W. Carpenter	William Sexton	Robert H. Naunton
1884	William Sexton	C. Mason Kinne	*C. P. Farnfield
1885	C. Mason Kinne	*Zenas P. Clark	Robert H. Naunton
1886	*Zenas P. Clark	*John W. Staples	Robert H. Naunton
1887	*John W. Staples	*Wm. L. Chalmers	Bernard Faymonville
1888	*Wm. L. Chalmers	L. B. Edwards	Bernard Faymonville
1889	L. B. Edwards	*Wm. J. Callingham	Thomas W. Fenn
1890	B. Faymonville	Wm. H. Lowden	Robert H. Naunton
1891	Wm. H. Lowden	Henry M. Grant	George H. Tyson
1892	Henry M. Grant	Stephen D. Ives	Edward Niles
1893	Stephen D. Ives	Rolla V. Watt	Russell W. Osborn
1894	Rolla V. Watt	V. Carus Driffield	Russell W. Osborn
1895	V. Carus Driffield	Herbert Folger	Louis Weinmann
1896	Herbert Folger	R. W. Osborn	Louis Weinmann
1897	R. W. Osborn	Edward Niles	Calvert Meade
1898	Louis Weinmann	Louis Weinmann	Calvert Meade
1899	Edward Niles	Frank J. Devlin	Calvert Meade
1900	Frank J. Devlin	Geo. W. Dornin	Calvert Meade
1901	Geo. W. Dornin	Wm. H. Gibbons	Calvert Meade
1902	Wm. H. Gibbons	Whitney Palache	Calvert Meade
1903	Whitney Palache	Jacob L. Fuller	Calvert Meade
1904	Jacob L. Fuller	A. W. Thornton	Calvert Meade
1905	A. W. Thornton	F. B. Kellam	Calvert Meade

*Deceased.

EXECUTIVE COMMITTEE.

1876	L. L. Bromwell	James R. Garniss	George F. Grant
1877	*Edward Brown	William J. Sanders	Andrew D. Smith
1878	Andrew D. Smith	Oliver H. Cole	George W. Spencer
1879	*Augustus P. Flint	William Macdonald	*Albert R. Gunnison
1880	George F. Grant	*Edward Brown	Oliver H. Cole
1881	George W. Spencer	E. W. Carpenter	C. Mason Kinne
1882	Thomas E. Pope	Andrew D. Smith	*Thomas A. Mitchell
1883	George F. Grant	Harvey W. Snow	Oliver Hawes
1884	George F. Grant	Harvey W. Snow	Oliver Hawes
1885	George F. Grant	Harvey W. Snow	Oliver Hawes
1886	*H. K. Belden	*George F. Ashton	Calvert Meade
1887	*H. K. Belden	*George F. Ashton	Calvert Meade
1888	*W. J. Callingham	George C. Pratt	Rolla V. Watt
1889	B. Faynonville.	Wm. H. Lowden	*Henry K. Belden
1890	*H. K. Belden	George Easton	Henry M. Grant
1891	*H. K. Belden	George Easton	Alfred Stillman
1892	Alfred Stillman	George Easton	V. Carus Driffield
1893	V. C. Driffield	Wm. H. Lowden	William Sexton
1894	Herbert Folger	Franz Jacoby	Jas. H. De Veuve
1895	R. W. Osborn	Frank J. Devlin	John T. Fogarty
1896	Frank J. Devlin	George W. Dornin	Whitney Palache
1897	Frank G. Argall	Edward Niles	Robert P. Fabj
1898	Whitney Palache	*Wm. H. Bagley	Leslie A. Wright
1899	John T. Fogarty	Alfred R. Grim	Whitney Palache
1900	Edward Niles	Wm. H. Lowden	Russell W. Osborn
1901	Frank J. Devlin	Rolla V. Watt	William Sexton
1902	Geo. W. Dornin	Herbert Folger	Louis Weinmann
1903	W. H. Gibbons	Herbert Folger	Louis Weinmann
1904	Whitney Palache	W. H. Gibbons	George W. Dornin
1905	J. L. Fuller	A. W. Thornton	W. H. Gibbons
	Whitney Palache		Geo. W. Dornin

LIBRARY COMMITTEE.

1876	Geo. W. Spencer	Robert M. Magill	Eyron C. Dick
1877	*James W. Hart	Hugh Craig	Samuel D. Mayer
1878	J. W. Kinsley	Geo. W. Spencer	Ludwig Beck
1879	Oliver H. Cole	Jos. C. Jennings	Wm. J. Landers
1880	Geo. E. Butler	*Edward Brown	Chas. J. Van Tassel
1881	*John W. Staples	*Wm. J. Callingham	Robert H. Naunton
1882	Geo. W. Spencer	*Samuel O. Hunt	*John W. Staples

*Deceased.

LIBRARY COMMITTEE—Concluded.

1883	*John W. Staples	Geo. W. Spencer	Robert H. Naunton
1884	*Casper T. Hopkins	Geo. D. Dornin	*Andrew J. Bryant
1885	Geo. W. Spencer	William Sexton	*Samuel O. Hunt
1886	Geo. W. Spencer	William Sexton	
1887	Geo. W. Spencer	Rudolph Herold, Jr.	Thos. E. Pope
1888	Geo. W. Spencer	Edwin W. Carpenter	*John W. Staples
1889	Geo. W. Spencer	Edwin W. Carpenter	*John W. Staples
1890	Geo. W. Spencer	Edwin W. Carpenter	
1891	Geo. W. Spencer	Edwin W. Carpenter	*Alex. J. Wetzlar
1892	Geo. W. Spencer	Herbert Folger	Jas. H. De Veuve
1893	Herbert Folger	*Henry K. Belden	Richard C. Medcraft
1894	*Alex. J. Wetzlar	A. G. Dugan	Benj. J. Smith
1895	A. G. Dugan	Herber Folger	Edw. P. Farnsworth
1896	Frank G. Argall	Geo. W. Dornin	Charles C. Echlin
1897	William Maris	*Charles C. Echlin	Herbert Folger
1898	Herbert Folger	Benj. J. Smith	Frederick B. Kellam
1899	Herbert Folger	H. McD. Spencer	Whitney Palache
1900	Herbert Folger	Frederick B. Kellam	Frank G. Argall
1901	Jacob L. Fuller	Charles B. Hill	Peter F. Gilroy
1902	Jacob L. Fuller	Peter F. Gilroy	Frederick B. Kellam
1903	A. M. Brown	Clinton Folger	D. A. Spencer
1904	W. H. Lowden	Herbert Folger	Benj. J. Smith
1905	W. H. Lowden	Herbert Folger	Benj. J. Smith

CALIFORNIA KNAPSACK.

1879	Charles Mason Kinne, Editor	W. Macdonald, Associate Editor
1880	Charles Mason Kinne, Editor	
1881	Charles Mason Kinne, Editor	G. F. Grant, Associate Editor
1882	Charles Mason Kinne, Editor	
1883	Charles Mason Kinne, Editor	
1884	Charles Mason Kinne, Editor	
1885	George F. Grant Editor	
1886	George F. Grant, Editor	
1887	Edwin W. Carpenter, Editor	
1888	*Alexander J. Wetzlar, Editor	
1889	*Alexander J. Wetzlar, Editor	
1890	George F. Grant, Editor	
1891	George F. Grant, Editor	
1892	George F. Grant, Editor	
1893	George F. Grant, Editor	

*Deceased

CALIFORNIA KNAPSACK—Concluded.

1894	George F. Grant, Editor	Edward Niles, Associate Editor
1895	George F. Grant, Editor	Edward Niles, Associate Editor
1896	George F. Grant, Editor.	Edward Niles, Associate Editor
1897	George F. Grant, Editor	Edward Niles, Associate Editor
1898	George F. Grant, Editor	Edward Niles, Associate Editor
1899	George F. Grant, Editor	Edward Niles, Associate Editor
1900	George F. Grant Editor	Edward Niles, Associate Editor
1901	George F. Grant, Editor	Edward Niles, Associate Editor
1902	George F. Grant, Editor	Edward Niles, Associate Editor
1903	George F. Grant, Editor	Edward Niles, Associate Editor
1904	George F. Grant, Editor	Edward Niles, Associate Editor
1905	George F. Grant, Editor	Edward Niles, Associate Editor

DINNER COMMITTEE.

(From first banquet in 1881, George W. Spencer, retiring president, to the present time.)

George W. Spencer

George F Grant.

*Deceased.

LIST OF MEMBERS

By Resolution of the Executive Committee the present opportunity is taken to publish a list of members, corrected to date of publication, the original membership roll having been destroyed and the list published in the proceedings of 1907 being incomplete.

ACTIVE MEMBERS.

- Agnew, F. J., Special Agent, Pennsylvania Fire Ins. Co.
Alverson, W. W., with Continental Ins. Co.
Anderson, C. H., Special Agent, Springfield Ins. Co.
Ankele, J. H.
Argall, F. A., Adjuster.
Bailey, A. E., Special Agent, Insurance Company of North America.
Bailey, J. D., General Agent, Insurance Company of North America.
Bailey, A. T., Special Agent Home F. & M. Insurance Company.
Bangs, Franklin, Secretary, Home F. & M. Insurance Company.
Banks, J. H. Special Agent, Hamburg-Bremen Fire Ins. Co.
Bates, H. L. A., Manager Shawnee Ins. Co.
Benner, Harry, Special Agent, German-American, Phoenix, New Hampshire and German Alliance Ins. Co's.
Bertheau, C., Manager, Aachen & Munich and Hanover Ins. Co's.
Blanchard, H. P., Ass't. Secretary, Fireman's Fund Insurance Co.
Bliss, Walter E., Special Agent, Milwaukee Mechanic Ins. Co.
Boardman, Geo. C., of Boardman & Spencer, Gen. Agents, Aetna Ins. Co.
Breeding, W. H., Special Agent, Aetna Ins. Co.
Bromwell, L. L., General Agent, Milwaukee Mechanics Ins. Co.
Brooks, Geo. W., Secretary California Ins. Co.
Broomell, B. B., Special Agent and Adjuster.
Brown, A. M., of E. Brown & Sons, General Agents, Svea, Agricultural and Globe & Rutgers.
Brown, H. H., of E. Brown & Sons.
Brush, R. G., Special Agent, Liverpool & London & Globe Ins. Co.
Burgard, John H., Special Agent, Svea Ins. Co.
Burke, H. R., Special Agent, Royal and Queen Insurance Companies.
Campbell, Warren, Special Agent for Manager Conroy's Companies, Los Angeles, Cal.

- Chipman, W. F.
 Christensen, Chas., of Christensen & Goodwin, Managers, American Central, St. Paul and Mercantile Ins. Co's.
 Chapuis, F. A., Manager Seaboard Ins. Co.
 Cleveland, W. W., of Cleveland & Trathen, Managers, Franklin Fire Ins. Co.
 Coddling, Geo. C., Special Agent, Springfield Ins. Co.
 Colvin, Chas. A., Special Agent, Phoenix Ins. Co.
 Conroy, T. J., Manager, Caledonian and Rochester German Ins. Co's.
 Cosgrove, J. E., Special Agent Northern Assurance Co.
 Craft, Chas. A., Special Agent, Cotton, Bell & Co.
 Craig, Homer A., General Adjuster, Pennsylvania Fire Ins. Co.
 Crandall, J. E., Special Agent, Springfield F. & M. Ins. Co.
 Crooks, J. C., Special Agent, E. Brown & Sons Agency.
 Crux, Geo. A., Assistant Manager, Caledonian and Rochester German Insurance Companies.
 Cunningham, Jas. C., Special Agent, American Central, St. Paul, and Mercantile.
 Curtis, J. F. D., Manager, Prov.-Washington Ins. Co.
 Danker, H., with Western Assurance Co.
 Davenport, Dixwell, Special Agent, Phoenix Assurance Co.
 Davies, Arthur P., Special Agent, Queen City Fire Ins. Co.
 Dayton, W. S., Special Agent, McNear & Wayman.
 De Lappe, R., Special Agent, American Central, St. Paul and Mercantile Ins. Co's.
 Dennis, Jas. J., Special Agent, Hartford Fire Ins. Co.
 Devlin, Frank J., Manager, Atlas and Manchester Assurance Co's.
 Devine, Geo. E., Special Agent, Hartford Fire Ins. Co.
 DeVeuve, Clarence, Gen'l. Agent, Seattle F. & M. Ins. Co.
 Dickson, Frank W., Manager, Royal Exchange Assurance Co.
 Dollard, Robert E., Special Agent, Hartford Fire Ins. Co.
 Dornin, Geo. D., Manager, Springfield Ins. Co's.
 Dornin, Geo. W., Ass't. Manager, Springfield Ins. Co.
 Dornin, John C., Ass't. Manager, Springfield Ins. Co.
 Driffield, V. Carus
 Dutton, W. J., President, Fireman's Fund Insurance Co.
 Dutton, Grayson, Special Agent, Fireman's Fund Ins. Co.
 Edwards, L. B.
 Eitel, Edw. E., Special Agent, Home F. & M. Insurance Co.
 Eldred, E. P., Special Agent, Royal Ins. Co.
 Elwell, W. T., Special Agent, Aachen & Munich and Hanover Ins. Co's.
 Fabj, R. P., Special Agent, L. & L. & Globe Ins. Co.
 Farnsworth, Ed. P., Independent Adjuster.

- Farr, F. H., Special Agent, Royal and Queen Ins. Co's.
Faymonville, Bernard, Vice-President, Fireman's Fund Insurance Co.
Field, Alexander, District Manager Board of Fire Underwriters.
Flack, E. B., Special Agent, Christensen & Goodwin.
Fogarty, J. T., Ass't. Manager Royal and Queen Insurance Co's.
Folger, Clinton, Joint Manager, New Zealand Ins. Co.
Folger, Herbert, Ass't. Gen. Agent, German-American, Phoenix and German Alliance Ins. Co's.
Fores, Harry W., Field Representative, Scottish Union & National Insurance Co.
Fortmann, W. G., Special Agent, Aachen Munich and Hanover Ins. Co's.
Foulkes, F. W., Special Agent, Phenix of Brooklyn.
Frank, Wm.
Francis, Guy, Special Agent, Connecticut Fire Insurance Co.
French, John S., Special Agent, Fireman's Fund Ins. Co.
Frith, T. T., Special Agent, London and Niagara Ins. Companies.
Frudinfeld, L. S., Manager, Queen City Fire Ins. Co.
Fuller, J. H., Special Agent, Norwich Union Fire Ins. Society.
Fuller, J. L., Ass't. Manager, Norwich Union Fire Insurance Society.
Gabrielson, C. D., Special Agent.
Gallegos, R., Asst. Manager, Phoenix Assurance Co.
Garrigue, R. H., Special Agent, C. J. Stovel & Co.
Gaston, F. W., Field Representative, Scottish Union & National Ins. Co.
Gerould, P. E., Special Agent.
Gibbons, W. H., General Inspector, E. Brown & Sons General Agency.
Glesy, A. W., Special Agent, Nor. Union Fire Ins. Soc'y.
Gill, W. S., Special Agent, Svea Ins. Co.
Gilliland, Adam, Special Agent, Hartford Fire Insurance Co.
Goodwin, Benjamin, of Christensen & Goodwin, Managers American Central, St. Paul and Mercantile.
Gordon, Harry F., of Gordon & Hoadley, General Agents, American N. J.
Goggin, Gerald E., with London and Niagara Ins. Co.
Gray, Geo. T., Special Agent, Christensen & Goodwin.
Grant, Geo. F., General Agent Franklin Fire Ins. Co.
Grant, H. M., Independent Adjuster, Portland, Oregon.
Grant, Tom C., General Agent, North British & Mercantile Ins. Co.
Griffith, P. H., Special Agent, Hartford Fire Ins. Co.
Griffith, John T.

- Grim, Alfred R., Assistant Manager, Aachen & Munich Ins. Co.
 Grove, W. W., Special Agent, Hartford Ins. Co.
 Guerraz, Geo. F., Special Agent, Fireman's Fund Ins. Co.
 Gunn, John W., Special Agent, Liverpool & London & Globe.
 Gutte, I.
 Haldan, E. B.
 Hally, F. W., Special Agent, Aachen & Munich and Hanover Ins. Companies.
 Hall, O. N. Special Agent, Phoenix Assurance Co.
 Harrison, J. Hunter, Special Agent, Shawnee Ins. Co.
 Hamilton, J. K., Special Agent, Insurance Co. of North America.
 Haven, Chas. D., Resident Secretary, Liverpool & London & Globe.
 Henry, Carl A., of C. A. Henry & Co., General Agents, Sun Ins. Office and Michigan F. & M. Ins. Co.
 Heuer, G. A. R., Special Agent.
 Hewitt, Dixwell, of Palache & Hewitt, General Agents, Hartford Fire Ins. Co.
 Herold, Rudolph.
 Hill, Chas. B., Special Agent, German-American and Phoenix Ins. Co's.
 Hill, Chas. S., Special Agent, Springfield Ins. Co.
 Hill, Wm. H., Special Agent, Edward Brown & Sons, Gen'l. Agency.
 Hoadley, G. A., Special Agent, Gordon & Hoadley.
 Hoagland, W. W., Special Agent, Sun Ins. Office and Michigan F. and M. Ins. Co.
 Hopkins, W. B., Special Agent, London & Lancashire Fire Ins. Co.
 Houseworth, Harrison, Special Agent, Liverpool & London & Globe Ins. Co.
 Hunter, F. L., Resident Manager Northern Assurance Co.
 Hunter, R. D., Special Agent, Fireman's Fund Insurance Co.
 Ives, S. D., Vice-President, Home F. & M. Insurance Company.
 Jackson, W. A., Special Agent, Commercial Union and Palatine Ins. Co's.
 Jacoby Franz, Independent Adjuster.
 Johnston, Albert Sydney, Special Agent, London & Niagara Ins. Co.
 Kaltz, Bruce, Special Agent, Norwich Union Fire Ins. Society.
 Kellam, F. B., Branch Secretary, Royal and Queen Insurance Co's.
 Keller, W. F., Special Agent, North British & Mercantile Ins. Co.
 Kinne, C. Mason, Ass't. Resident Secretary, Liv. & Lon. & Globe.

- Klinger, Wm. M., Special Agent, Fireman's Fund Insurance Co.
Lamey, H. T., Manager Western Assurance and British-America Assurance Companies.
Lamping, L. F., Special Agent, Royal Exchange Assur. Co.
Landers Wm. J., Resident Manager, London and Niagara Ins
Langley, Chas. L., Special Agent, Catton, Bell & Co.
Lindsay, A. N., Special Agent, California Ins. Co.
Lockey, Richard, Independent Adjuster, Helena, Montana.
Lord, H. Leslie, Special Agent, Sun and Michigan Ins. Co's.
Lowden, W. H., Manager, Norwich Union Fire Insurance Society.
Lyndall, Chas. P. Special Agent, Home F. & M. Insurance Co.
Macdonald, Burns, Special Agent, Westchester Ins. Co.
Macdonald, Wm., Manager, Westchester Ins. Co.
McCarthy, C. V., Special Agent, Pennsylvania Fire Ins. Co.
McKowen, J. H., Independent Adjuster, Spokane, Wash.
Manheim, H. S.
Mann, H. R., Manager, New York Underwriters' Agency.
Manning, F. J. H., Special Agent, Commercial and Palatine Insurance Companies.
Manning, William, Special Agent, Atlas and Manchester Assurance Companies.
Maris, Wm., Independent Adjuster.
Mayer, F. J. Alex., Oregon State Agent Fire Ass'n of Philadelphia.
Meade, Calvert, Independent Adjuster, Secretary Fire Underwriters' Association.
Medcraft, R. C., with Catton, Bell & Co.
Mel, Louis, Special Agent, Aetna Insurance Company.
Mendell, Geo. H., Jr.
Mendell, Jno. M., Special Agent, London and Niagara Ins. Co's.
Mesick, S. P., Special Agent, Pennsylvania Fire Ins. Co.
Miles, D. E., Assistant Manager, Westchester Ins. Co.
Mills, Harrold, Special Agent, Phenix Ins. Co. of Brooklyn.
Miller, Chas. E., Special Agent, Hartford Ins. Co.
Miller, W. L. W., General Agent, British-America and Western Assurance Co's.
Mitchell, Geo. M., Metropolitan Agent, Home and Westchester Fire Ins. Co's.
Morgan, E. C., Special Agent, Prov.-Washington Ins. Co.
Morgan, W. O., Special Agent, Hartford Fire Insurance Company.
Morrison, Ed. C., Supervisor of Agencies, Aetna Insurance Co.
Morrow, J. H., Special Agent, Com'l. Union Ins. Co.
Murphy, Joseph A., Special Agent, Aetna Ins. Co.

- Nason, A. G., General Agent, Continental Ins. Company.
Naunton, R. H., Special Agent and Adjuster.
Niebling, E. T., Manager, Commercial Union and Palatine Insurance Companies.
Niles, Edward, Supt. of Agencies, North British and Mercantile Insurance Co.
Nippert, Paul M., General Agent.
Osborn, R. W., Manager, Pennsylvania Fire Ins. Co.
Olney, P. de S., Special Agent, Commercial Union and Palatine Insurance Companies.
Olds, A. C., State Agent, Phenix of Brooklyn.
Palache, Whitney, of Palache & Hewitt, General Agents, Hartford Fire Insurance Co.
Pierce, D. W., Special Agent, New York Underwriters.
Quick, J. R., Special Agent, Fireman's Fund Ins. Co.
Quitow, V. H., Special Agent, Pennsylvania Fire Ins. Co.
Raymond, W. H., Special Agent, Liv. & London and Globe Ins. Co.
Reed, James S., Special Agent, Connecticut Fire Ins. Co.
Richards, John D., with Norwich Union Fire Ins. Society.
Richards, J. H., Special Agent.
Robins, F. C. H., Independent Adjuster.
Rooklidge, J. W., Special Agent, Royal and Queen Ins. Co's.
Porep, Walter P., Special Agent, Edward Brown & Sons.
Rountree, R. H., Special Agent, Liv. & London & Globe Ins. Co.
Schallenberger, C. A., with California Ins. Co.
Schlingheyde, C. E., Special Agent, Union and Law Union & Crown Assurance Co's.
Schnabel, O. E., Special Agent New Zealand Ins. Co.
Scott, Chas. O., Special Agent, Insurance Co. of North America.
Sewell, A. F., with New York Underwriters.
Sexton, Wm., General Adjuster, Fireman's Fund Insurance Co.
Sexton, Wm. A., Special Agent.
Sherrard, McKee, Special Agent, Fireman's Fund Ins. Co.
Smedberg, W. R.
Smith, Benj. J., Manager, Connecticut Fire Insurance Company.
Smith, Frank G., Special Agent, London & Lancashire Ins. Co.
Smith, C. W.
Smith, H. Brownson, Independent Adjuster, Butte, Montana.
Smith, H. H., Manager, Union Assurance and Law Union & Crown Insurance Companies.
Spaulding, M. E., Special Agent, Hartford Fire Ins. Co.
Spears, J. V., Special Agent, Fireman's Fund Ins. Co.
Spencer, D. A.

- Spencer, Geo. W., of Boardman & Spencer, Gen'l. Ag'ts., Aetna Ins. Co.
- Spencer, H. McD., Independent Adjuster.
- Speyer, Walter-M., Joint Manager New Zealand Ins. Co.
- Speyer, Walter.
- Staniford, F. C., Special Agent, Norwich Union Fire Ins. Society.
- Stewart, D. L., Special Agent, Royal Ins. Co.
- Stovel, C. J., General Agent, Jefferson, Girard, Nassau, New Brunswick and North River Ins. Co's.
- Stover, Fred R., Special Agent, Royal and Queen Ins. Co.
- Stoy, Samuel B., Special Agent, London & Lancashire Fire Ins. Co.
- Strader, John E., Special Agent, Scottish Union & National Ins. Co.
- Taylor, Churchill, of Watson, Taylor & Sperry.
- Thieme, Oscar, Manager Austrian Phoenix Ins. Co.
- Thompson, Chas. R., Special Agent, Fireman's Fund Ins. Co.
- Thompson, E. R., Special Agent, Atlas and Manchester Assurance Company.
- Thomson, M. H., Asst. Gen'l. Agt., National, Colonial Fire Underwriters.
- Thornton, A. W., Special Agent, London and Niagara Ins. Co's.
- Thornton, A. C., Special Agent, Fireman's Fund Ins. Co.
- Tiedemann, T. J. A.
- Trathen, A. H., of Cleveland & Trathen, Managers Franklin Fire Ins. Co.
- Trumbull, J. B., Special Agent, Insurance Co. of North America.
- Tyson, Geo. H., General Agent, German-American, Phoenix, New Hampshire, and German-Alliance Ins. Co's.
- Urmston, J. K., Special Agent, Royal and Queen Ins. Co's.
- Van Valkenburg, Chas., Special Agent, Svea Ins. Co.
- Von Etlinger, A. T., Special Agent, Commercial Union and Palatine Ins. Co's.
- Walden, J. B., Special Agent, Royal and Queen Insurance Co's.
- Watson, Kenneth, of Watson, Taylor & Sperry.
- Walsh, Frank E., Special Agent, Milwaukee Mechanics Ins. Co. Los Angeles.
- Ward, C. H.
- Warner, J. W., Special Agent, California Ins. Co.
- Waters, J. N., Special Agent, Sun and Michigan Ins. Co's.
- Watt, Rolla V., Manager, Royal and Queen Insurance Companies.
- Wayman, W. O., Manager, National, Colonial Fire Underwriters Ins. Co's.
- Webber, J. F. R., Special Agent, Springfield F. & M. Ins. Co.

- Weinmann, Louis, Secretary, Fireman's Fund Insurance Co.
Wellington, Geo. J.
- Wendler, Chas. A., Special Agent, Royal and Queen Ins. Co's.
- Whelan, W. D., Special Agent, Fireman's Fund Ins. Co.
- White, F. G., Special Agent, Fireman's Fund Insurance Company.
- Whitmer, A. W., Special Agent, Home F. & M. Insurance Co.
- Whitley, N. B., Special Agent, German-American, Phoenix, German Alliance and New Hampshire Ins. Co's.
- Windus, W. V., Special Agent, Catton, Bell & Co.
- Williams, T. H., Special Agent, German-American, Phoenix and German Alliance Ins. Co's.
- Wilson, J. Scott.
- Wilson, F. P., State Agent, Continental Ins. Co.
- Wright, B. D., Special Agent, British-America and Western Assurance Co's.
- Wyper, James, Manager, London and Lancashire Fire Ins. Co.
- Young, E. J., Special Agent, North British & Mercantile Ins. Co.
- Young, Walter H., Special Agent, Hamburg, Bremen Fire Ins. Co.
- Zwick, Wm. F., Special Agent Christensen & Goodwin Agency.

ASSOCIATE MEMBERS.

Banner, Geo. H.	Folger, R. S.	Mills, H. F.
Barrett, L. W.	Hackett, William H.	Muir, Andrew R.
Barsotti, Charles	Hougaard, W. F.	Oxley, G. E.
Bishop, Wilson	Lester, Albert M.	Pattison, Fred C.
Burton, A. E.	Lowden, E. Kenneth	Stanbridge, C. H.
Chase, Harvey T.	Ludlow, Geo. W.	Thomas, F. G.
Conley, C.	McAnderson, Jno.	Vanderlip, H. F.
Daniels, A. N.	Magill, F. M.	Wilkinson, C. W.
Dobie, Chas. C.	Mariner, G. S.	Yates, Roy O.

HONORARY MEMBERS.

- Bigelow, H. H., Fresno Co., Cal.
 Chard, Thomas S., Chicago, Ill.
 Carpenter, E. W., Roxbury, Mass.
 Carey, Jas. A., San Francisco.
 Cofran, J. W. G., Chicago, Ill.
 Dickson, Robt., New York.
 Donnell, S. M., San Francisco.
 Du Val, W. S., San Francisco.
 Gurrey, A. R., Honolulu, H. I.
 Heifner, C. G., Olympia, Wash.
 James, N. T., San Francisco.
 Low, Geo. P., San Francisco.
 Laton, Chas. A., San Francisco.
 Marshall, John, Jr., Chicago, Ill.
 McElhone, F. H., Chicago, Ill.
 McKenzie, Lee, Seattle, Wash.
 Mohrhardt, E. F., San Francisco.
 Morrow, J. H., Los Angeles, Cal.
 Neal, Robt. W., San Francisco.
 *Nichols, C. M. San Francisco.
 Parkhurst, H. E. Salt Lake City, Utah.
 Porter, F. H., San Francisco.
 Robertson, Geo. N., San Francisco, Cal.
 Stillman, Alfred, San Francisco.
 Stone, J. C., Portland, Oregon.
 Smith, A. D., Oakland, Cal.
 Thompson, E. L., Portland, Oregon.
 Wilson, D. B., San Francisco.
 Williams, Sylvester G., Denver, Colo.
 Winne, Peter, Denver, Colo.

FIRE UNDERWRITER'S ASSOCIATION OF THE PACIFIC

OFFICERS FOR 1906.

President	- - - - -	F. B. Kellam
Vice-President	- - - - -	A. M. Brown
Secretary and Treasurer	- - - - -	Calvert Meade
Assistant Secretary and Librarian	- - -	J. P. Moore

EXECUTIVE COMMITTEE

A. W. Thornton	F. B. Kellam
Louis Weinmann	R. W. Osborn
Rolla V. Watt	

DINNER COMMITTEE

George W. Spencer	George F. Grant
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CALIFORNIA KNAPSACK

George F. Grant	- - - Editor
Edward Niles	- - - Associate Editor

Proceedings

of the

Thirty-First Annual Meeting

of the

Fire Underwriters Association

of the Pacific

SAN FRANCISCO, CAL., JANUARY 15-16, 1907

Printed by Order of the Association

1907

THIRTY-FIRST ANNUAL MEETING.

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THIRTY-FIRST ANNUAL MEETING

FIRE UNDERWRITERS' ASSOCIATION
OF THE PACIFIC

OFFICERS FOR 1906.

President	-	-	-	-	-	-	F. B. Kellam
Vice-President	-	-	-	-	-	-	A. M. Brown
Secretary and Treasurer	-	-	-	-	-	-	Calvert Meade
Assistant Secretary and Librarian	-	-	-	-	-	-	J. P. Moore

EXECUTIVE COMMITTEE

A. W. Thornton	F. B. Kellam
Louis Weinmann	R. W. Osborn
Herbert Folger	

DINNER COMMITTEE

George W. Spencer	George F. Grant
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CALIFORNIA KNAPSACK

George F. Grant	-	-	-	Editor
Edward Niles	-	-	-	Associate Editor



F. B. KELLAM.

Fire Underwriters Association of the Pacific

FIRST DAY.

San Francisco, Cal., Jan. 15, 1907.

The following members and guests were present at the Annual Meeting, January 15th and 16th, 1907: ..

Agnew, F. J.	Gibbons, W. H.	Richards, J. H.
Anderson,*C. H.	Gill, W. S.	Robertson, Geo. N.
Bacon, E. H.	Gilliand, Adam	Robbins, F. C. H.
Bailey, A. E.	Grove, W. W.	Rogers, L. B.
Banks, J. H.	Griffith, P. H.	Rountree, R. H.
Bates, H. L. A.	Gunn, Jno. W.	Sewell, A. F.
Brown, A. M.	Heuer, G. A. R.	Smith, C. W.
Burke, H. R.	Hoadley, G. A.	Spaulding, M. E.
Brooks, G. W.	Houseworth, H.	Spencer, D. A.
Cook, Harold J.	Honeyman, W. B.	Stewart, D. L.
Craft, C. A.	Hyde, Prof. C. G.	Stover, F. R.
Crandall, J. E.	Hunter, Frank L.	Strader, J. E.
De Jarnatt, W. B.	Kellam, F. B.	Tiedemann, T. J. A.
Dennis, J. J.	Kinne, C. Maçon	Thompson, C. R.
Devine, Geo. E.	Lewick, W. T.	Thompson, E. R.
Devlin, F. J.	Lindsay, A. N.	Thornton, A. C.
Dollard, R. E.	Meade, Calvert	Taffender, W. E.
Dornin, Geo. D.	Mel, Louis	Trumbull, J. R.
Dornin, Geo. W.	Mendell, G. H., Jr.	Urmston, J. K.
Driffield, V. C.	Miller, A. E.	Walden, J. B.
Dutton, Grayson	Mills, Harry	Watson, J. L.
Duval, W. S.	Morgan, W. O.	Watt, Rolla V.
Eldred, E. P.	Morrison, E. C.	Weinmann, Louis
Frudensfeld, L. F.	Murphy, J. A.	Webber, J. F. R.
Flack, E. B.	McCarthy, C. V.	Wendler, C. A.
Fogarty, J. T.	Naunton, R. H., Jr.	Warner, J. W.
Fuller, J. L.	Osborn, R. W.	Windus, W. V.
Fuller, Jno. H.	Porep, Walter P.	Young, Walter
Gabrielson, C. D.	Quirk, J. R.	
Gallegos, R.	Quitow, V. H.	

TREASURER'S REPORT

The meeting was called to order at 10 o'clock a. m., President F. B. Kellam in the chair.

The President: There is no doubt we have a quorum, and I am very glad to see so many members and guests present. We shall have to dispense with the calling of the roll, as we have no roll. We shall also have to omit the reading of the minutes of the last meeting, as we have no minutes. It will hardly be necessary, I think, to ask for a motion that these two formalities be dispensed with. We will therefore proceed at once with the regular order of business. First, we will listen to the report of the Secretary and Treasurer.

SECRETARY AND TREASURER'S REPORT.

The Secretary: Gentlemen, the following is my report as Secretary and Treasurer for the year ending January 15, 1907:

Financial Statement.**Receipts.**

Cash in Bank of California, April 18, 1906..		\$ 35 32	
Fire loss from Firemen's Fund Ins. Co.....	\$500 00		
Annual dues	35 00		
Assessment	12 50	547 50	
			<hr/>
			\$582 82

Disbursements.

Paid for two floral pieces.....	\$ 20 00		
Paid subscriptions to Ins. Literature.....	15 50		
Paid stationery and printing.....	13 90		
Paid postage, express and typewriting.....	22 70		
Paid J. P. Moore, Librarian.....	68 00	140 10	
			<hr/>
			\$442 72
Balance in Bank of California.....	\$442 72		

All records were burned April 18-20, 1906. In addition to above cash in bank we have as an asset an order for one share of stock in the Firemen's Fund Insurance Co.

Insurance Institute.

Cash in Bank of California, April 18, 1906..	\$129 25
Audited and found correct.	

From the annual proceedings of 1905 I have a list of 224 active members, and 26 honorary members. The associate membership will be compiled during the coming year. No associate member was called upon for dues for 1906.

The President: Gentlemen, you have heard read the report of the Secretary and Treasurer of the Association. What is your pleasure?

Mr. Gibbons: I move that the report be received, adopted and placed on file.

The motion was duly seconded and unanimously carried.

The President: I believe the Secretary also has the report of the librarian, Mr. J. P. Moore. We will now listen to the report of the Librarian.

The Secretary: The Librarian's report for the year is as follows:

LIBRARIAN'S REPORT.

As Librarian, at the last annual meeting, January, 1906, I gave a report upon the work done in, and the condition of the library. At that time you had in bound and unbound volumes and pamphlets something over 6000 in all.

At the beginning of the year we received a number of valuable additions by donation, in addition to the proceedings of various societies with which we were in correspondence.

By order of your committee about forty volumes were bound and placed on the shelves.

The work of cataloging was kept up, and on the day of the disastrous conflagration had so far advanced that there only remained uncatalogued a few of the proceedings and reports of Institutes, and the first ten volumes of the New Series of the Law Journal. This latter, as you know, was being indexed by subjects.

The work of condensing our card catalogue had been undertaken, and at the time of the conflagration was nearly completed. By this means we brought authors and subjects onto the fewest possible number of cards.

Of the destruction of our library and all its appliances you are well aware. Everything was lost with but a single and singular exception—one book—"Fire and Explosion Risks," by Von Schwartz, was saved by the thoughtfulness of our Ex-President, Mr. J. L. Fuller.

That saved volume will be our foundation for a future library, which like our well-beloved city, is bound to grow again and become a power for usefulness greater than ever before.

Nothing daunted by our great loss, your Secretary at once

took up the matter of a new library, and to all our correspondents addressed the following letter:

"In the calamity of April last, all books, pamphlets and data of the Fire Underwriters' Association of the Pacific were destroyed. We realize the loss to the insurance business, but hope is ever with us and we appeal to like institutions for duplicates, so that the library may be rehabilitated. Can you forward us, at our expense, your duplicate publications, and for such works as you have for sale will you kindly mail price list for our selection?"

I am happy to say that expressions of the warmest sympathy have been received from nearly all our correspondents, and offers of help as far as possible.

In reply to the letter of your Secretary the following donations have been made, and are now in our new library:

National Board of Fire Underwriters—Special Report of the San Francisco Conflagration of April, 1906. (Illustrated.)

Southeastern Tariff Association—Standards for Construction and Equipment, Rates, Rules and Forms, January, 1903, with Amendments to Date.

American Institute of Architects—Proceedings of the 39th Annual Convention, 1905. Quarterly Bulletin, January, 1906.

Underwriters Laboratory, National Fire Protection Association—Proceedings National Fire Protection Association, 1906.

Proceedings National Fire Protection Association, List of Members, etc., 1906-07.

Quarterly Bulletins of the Committee on Special Hazards for the Years 1903, 1904, 1905, 1906.

Rules and Requirements for:

Fire Doors and Shutters.....	1905 and 1906
Storage of Fuel Oil.....	1902
Waste Cans	1903
Electrical Fittings	1906
Electrical Fire Pumps	1904
Gas and Gasoline Engines.....	1905
Gas and Gasoline Vapor Lighting Machines....	1904
Acetylene Gas Machines	1903
Slow-Burning Construction	1904
Sprinkler Equipments	1905
Unlined Linen Fire Hose	1905
Wired Glass	1905-1906
Grain Dryers	1901
Hydrants for Mill Yard Use.....	1902
Steam Fire Pumps	1904

Rotary Fire Pumps	1905
Steam Pump Governors	1905
Private Fire Departments	1902
Signaling Systems	1905
Hose Houses for Mill Yards.....	1905

National Fire Proofing Company—Trial by Fire at San Francisco—The Evidence of the Camera. (Illustrated.)

Mr. A. R. Gunnison—Coast Review. Vol. II, No. 6; Vol. 53, No. 6; Vol. 55, No. 1; Vol. 56, No. 1; Vol. 60, No. 5.

Proceedings of the Fire Underwriters' Association of the Pacific for the years 1896, 1897, 1895, 1899, 1900, 1901, 1902.

Index to Proceedings, 1876, 1877.

Mr. R. W. Hilliard, N. E. Bureau of United Inspection—Proceedings of Annual Meetings for the Years 1890, 1891, 1892, 1893, 1894, 1895, 1901, 1902, 1903, 1904, 1905, 1906.

Philadelphia Fire Underwriters' Association—Annual Reports. Vols. 1, 2, 3 and 4 (1902 to 1907.) Schedules for Rating.

Factory Mutual Fire Insurance Companies—Rules for Installing:

Electric and Power Apparatus	1904
Approved Electrical Fittings	1906
Specifications for Fire Hose.....	1904
Specifications for Rotary Fire Pumps.....	1906
Specifications for Steam Fire Pumps.....	1904
Specifications for Wooden Tanks.....	1903
Specifications for Dry Pipe Automatic Sprinklers.	
Specifications for Standard Mill Construction.	

Underwriters Association of New York State—Manual for 1906. Approved Requirements and Schedules, 1903, and Supplements to Date.

Schedules for Salt Blocks.

Schedules for Theaters.

Schedules for Summer Hotels.

Schedules for Boot and Shoe Factories.

Schedules for Cement Mills.

E. E. Rittenhouse (Deputy Supt.)—Twenty-fourth Annual Report of the Supt. of Ins. of Colorado.

Mr. Edward F. Croker—Report of the Chief of Fire Department, New York, 1904.

Mr. A. Irving Brewster—Vol. I, "Fire Prevention."

Mr. Thomas A. Clancy—Report Chief of Fire Department, Milwaukee, 1905.

Mr. Calvert Meade—Bound Vol. Knapsack, 1898.

Mr. Gorham Dana, Underwriters Bureau of New England—

Reports Nos. 103, 104, 105; also two Copies Reports of National Fire Protection Association.

New England Ins. Exchange, C. M. Goddard—Reports promised but not yet arrived.

Factory Ins. Association—Plans for Cotton Mill. Plans for Warehouse.

Ins. Institute of Victoria (R. J. White, Hon. Secy.)—Proceedings for Year 1905.

Ins. Institute of Newcastle-upon-Tyne (F. F. Worthington, Hon. Secy.)—Proceedings for the Years 1896-97, 1897-98, 1898-99, 1899-1900, 1900-01, 1901-02, 1902-03, 1903-04, 1904-05, 1905-06,

Ins. Institute of Toronto (F. D. Macorquodale, Hon. Secy.)—Proceedings for the Years 1901-02, 1902-03, 1903-04, 1904-05, 1905-06.

British Fire Prevention Committee (Edwin G. Sachs, Chairman Executive Committee—Protection of Window Openings, No. 113. Fire Tests with Fire Extinguishers, No. 115. Fire Tests with Glass, No. 116.

Ins. Institute of Ireland (Pat B. Carphin, Hon. Secy.)—Proceedings for the Year 1905.

Fire Ins. Society of Philadelphia (Chas. A. Haxamer, Secy.)—Proceedings for the Years 1901-02, Vol. 1; 1902-04, Vol. 2; 1905-06, Vol. 4.

Mr. John McEwen—Proceedings Ins. Institute, Montreal. A complete set to date.

Prof. Ira H. Woolson, Columbia University, N. Y. City—Report of Tests Upon Sand-Lime Bricks.

Hamburg Bremen Ins. Co., F. O. Affeld, Manager—Papers upon "Reliable Statistics," "Fire Waste in the United States and How to Prevent It," "The Ounce of Prevention," "Pro-rata Liability or the Co-Insurance Clause," "The Lessons of Conflagrations."

The President: What shall be done with Librarian's report, gentlemen?

Mr. Gunn: I move that it be accepted and placed on file.

The motion was duly seconded and unanimously prevailed.

Mr. Gibbons: Mr. President, I move that the question of taking advantage of the opportunities spoken of in the letters just read by the Secretary be referred to the Executive Committee, so far as the acceptance or rejection of such offers is concerned.

The President: I think this is a matter that the Executive Committee will take up in the regular course of its duties, Mr. Gibbons.

Mr. Gibbons: It was my understanding that purchases of that sort could only be made by authority of the association. If, however, the Executive Committee would reach that in the ordinary course of business, of course, that is sufficient.

The President: I think the Executive Committee has power to make such purchases as are necessary for the library from time to time.

Mr. Watt: Mr. President, since I shall probably not be here when the subject comes up in regular order, I take this opportunity of saying that the companies which I represent will be very glad to make a subscription towards the rehabilitation of the library. I think a library is of the utmost importance. We are prepared to contribute \$100 to that end, and also to contribute practically a complete set of the "Coast Review," which I think we have saved in our vaults, if you desire. (Applause.)

The President: I am sure the association appreciates Mr. Watt's subscription and offer very much indeed. I trust it may be followed by similar contributions from other companies.

The next in our order of business is the report of the Executive Committee. In the absence of the chairman, Mr. A. W. Thornton, I will ask Mr. R. W. Osborn to read the report.

REPORT OF EXECUTIVE COMMITTEE.

Your Committee feels not unlike the carpenter who has lost his tools. The entire records of the association, including its most excellent library, were destroyed. As the proceedings of the last annual meeting were in the hands of the printer and destroyed, we are unable to present other than a most imperfect report of the Association.

The frightful catastrophe of April 18th and its few succeeding days will leave its indelible mark upon this Association.

LIBRARY.

The most lamentable to us as a body, was the loss of our library containing priceless records and information, the result

of years of accumulation. We believe that this library should be restored and members are urgently requested to do all they can personally toward the rebuilding of that invaluable asset of an Association such as the Fire Underwriters of the Pacific.

It is our belief that the insurance money received should be set apart for that purpose, although in the absence of an income from dues this fund has, at least temporarily, been used. We therefore recommend that just as soon as the income of the Association is re-established that this fund be repaid, and that, with all other funds possible, be used to re-establish the library.

INSTITUTE.

The conception of this auxiliary to the Association has been more than honored in the result which it accomplished. We recommend that it be re-established and that a course of lectures be instituted for the benefit of those who are moving to the higher posts within our profession.

The Institute during 1905 was not only self-supporting, but yielded a surplus, and which this year could be used toward the library fund.

MEMBERSHIP.

As all record of membership was lost, the Secretary has been vigilant in his effort to make his record complete, but has been unable to accomplish that. For such reason, we trust that all members will interest themselves in bringing the names of themselves and associates to the Secretary's desk.

DUES.

At the time of the fire the dues for 1906 had not been paid, that is to say, most of them. But as the Secretary's records were all burned, it is impossible for him to determine who have and who have not paid. It therefore rests with the individual member to pay the same to the Secretary, if he has not done so. We feel sure that all members will realize the importance of this, and they are urgently asked to help the Association by prompt payment of their dues for 1906 and those of 1907.

While we cannot say, as usually has been the custom, that the Association is in a flourishing condition, we nevertheless feel that this is a critical moment in the life of this society, and if each member will put his shoulder to the wheel and revitalize the old interest, we will close this year of 1907 with a deal of satisfaction and honor to ourselves.

Your committee feels that it would be wise to adopt the plan of nominations for President and Vice-President by a committee of three, one to be elected by the convention, one to be appointed by the Executive Committee and the retiring President to constitute the third, and we trust the Association will consider the plan favorably.

Respectfully submitted,

LOUIS WEINMANN,
ROLLA V. WATT,
R. W. OSBORN.

The President: Gentlemen, you have heard read the report of the Executive Committee. What is your pleasure regarding it?

Mr. G. D. Dornin: I move that the report be received and referred to a committee, which committee shall report upon the suggestions contained therein. I believe that is the general method adopted. I think the President's address is usually considered by the same committee, is it not?

The President: That has been the usual custom in the Association.

Mr. Dornin: That would be a good plan now, and I put the motion in that form, that the report of the Executive Committee hereafter to be appointed by the President, which committee shall also have referred to it the President's address, and that that committee report upon the recommendations contained in both the report of the Executive Committee and the President's address.

The motion was duly seconded.

The President—Gentlemen, it is moved and seconded, as I understand the motion, that the report of the Executive Committee be referred to a committee, to be hereafter appointed by the President, to consider the recommendations contained therein, as well as those which may be contained in the President's address. Are you ready for the question?

The motion passed unanimously.

The President—Have you any communications, Mr. Secretary?

APPLICATION FOR MEMBERSHIP.

The Secretary—I have applications, Mr. President, for membership in the Association from the following gentlemen:

Geo. W. Brooks, Secretary, California Insurance Company.
A. N. Lindsay, Special Agent, California Insurance Company.
J. W. Warner, Special Agent, California Insurance Company.
Mr. C. V. McCarthy, Special Agent of the Pennsylvania Fire Insurance Co.

Mr. W. V. Windus, Special Agent, Catton, Bell & Co.

Mr. J. B. Trumbull, Special Agent, Insurance Co. of North America.

Mr. Harrold Mills, Special Agent, Phenix Insurance Co. of Brooklyn.

Mr. Walter H. Young, Special Agent, Hamburg-Bremen Fire Insurance Co.

Mr. J. H. Banks, Special Agent, Hamburg-Bremen Fire Insurance Co.

Mr. Walter P. Porep, Special Agent, Edward Brown & Sons.

Mr. J. E. Strader, Special Agent, Scottish Union & National Insurance Co.

Mr. Robert E. Dollard, Special Agent, Hartford Fire Insurance Co.

Mr. Harrison Houseworth, Special Agent, Liverpool & London & Globe Insurance Co.

Mr. Clarence de Veuve, General Agent, Seattle Fire and Marine Insurance Co.

Mr. James Wyper, Manager, London and Lancashire Fire Insurance Co.

Mr. L. S. Frudenberg, Manager, Queen City Fire Insurance Co.

Mr. Arthur P. Davis, Special Agent, Queen City Fire Insurance Co.

Mr. R. Gallegos, Assistant Manager, Phoenix Assurance Co.

Mr. M. E. Spaulding, Special Agent, Hartford Fire Insurance Co.

The President—Gentlemen, these applicants are all either Special Agents or Managers of the various companies and offices named, and it would seem that they are all eligible to membership in our Association. Under a suspension of the rules they can be voted for at this meeting. I am ready to

entertain a motion that the rules be suspended and that these gentlemen be elected to the membership in the Association.

Mr. Gunn—I make that motion, Mr. President, that the rules be suspended, and that each of the gentlemen whose names have just been read by the Secretary be declared elected members of the Association.

Mr. Driffield seconded the motion, which carried unanimously.

The President—I am very glad to announce that the gentlemen named have been duly elected members of the Fire Underwriters' Association of the Pacific.

Mr. Weinmann—Mr. President, before you proceed with your address, I would like to make a suggestion to all of the members present, and that is, that each one hand his name, together with his address to the Secretary. As you have already announced our roll has been destroyed, and it is quite important that the Secretary should also have the address of each of the members, as well as his name. I think that should be not only done by the members present, but that it should be communicated by us to others who may be present later on during the meeting as well as those who will not be here at all. And I suggest that it be done at the earliest possible moment. I would like to suggest also that those who intend to attend the banquet at the Palace Hotel tomorrow night, hand their names to Mr. George W. Spencer at 514 California street, during the day, as Mr. Spencer is so very busy that he will be unable to give much attention to the matter tomorrow.

The President—The members present will take note of the suggestions of Mr. Weinmann. The next in order of business is the President's address, which I now have the pleasure of reading to you, and I will ask our Vice President, Mr. Brown, to kindly take the chair during its reading.

(The Vice President, Arthur M. Brown, took the chair, and the President read his address, as follows:

PRESIDENT'S ADDRESS.

I have the honor and the pleasure to welcome you on behalf of the Association to its Thirty-first annual meeting. It is, I believe, with more than usual pleasure that this welcome is given. The events of the year have diverted many of us from our accustomed paths, have scattered our respective offices, and have almost obliterated, for the time being, that daily opportunity for good fellowship, open alike to the office man, or the field man in from his travels, which was a feature of the insurance business in old San Francisco. Our meeting has therefore greater significance perhaps than ever before in bringing us together at this time in furtherance of the objects of this Association.

A desire to show his appreciation of the high honor done him, by leaving a record of progress upon his retirement, has actuated every occupant of the office of President of this body; in my own case not less than in that of any other. That it has been my fortune to preside over the affairs of the Association during its most disastrous year, I accept with all the philosophy at my command; my regret is that I must inspire my successors in the presidential chair by precept rather than by example.

THE YEAR OF THE CONFLAGRATION.

While precedent calls for some brief review of the year's work there is certainly one event which requires no reminder and no precedent for its mention. The memory of 1906, the year of the San Francisco conflagration, will live long in the annals of fire insurance, and particularly with this Association and its members. A sweeping conflagration in this city had long been considered a possibility, but the reality was in excess of anything our experience could have anticipated or our imagination pictured, for by the simultaneous starting of fires in many places, accompanied by the total disruption of the water supply, the natural barriers long depended upon were rendered almost useless. The division effected by Market street cutting the city from northeast to southwest, even if the fire did not cross, was of no advantage with fires starting at the same time on both sides. It is, however, to be noted that save in the report of one instance, and that one not fully authenticated, the fire did not cross Market street, and while it crossed Van Ness avenue at two points, that barrier proved of sufficient assistance to enable the fire fighters to finally check the western progress of the conflagration. The task that confronted the companies in the

adjustment of claims under policies which have been estimated as numbering over 100,000 was unprecedented and almost staggering at first view. This work has been accomplished, and that it has been well accomplished is now the verdict alike of the insurance fraternity and the general public. Two factors have contributed to this result—on the part of the companies, with but few exceptions, a spirit of fairness in the face of a catastrophe not contemplated in the theory of underwriting, and on the part of the claimants a spirit of patience and forbearance unlooked for and unprecedented. That the enormous sum already paid out in this city by the Companies (estimated at one hundred and seventy-five millions) has been distributed without the slightest disturbance to the business affairs of the country may be considered a great financial achievement.

EFFECT ON THE BUSINESS.

The influence of this great fire on the theory and practice of insurance will be felt for a very long time to come. The insurance loss in San Francisco equaled 80 per cent of the entire capital and surplus invested in the business of fire insurance by those companies licensed to do business in California, including the foreign companies, and it will take many years of careful management to place the business in its former position of strength.

An immediate effect of the conflagration upon business affairs in our own sphere has been the (from a total of 109 companies) retirement of 43 companies from business in San Francisco, of 36 companies from business in California, and of 32 companies from business in the Pacific Coast field. Of these six have failed and gone into the hands of receivers.

The date on which our meetings are now held is so early in the year that little is available as regards the past year's record in figures save estimates, and these indicate, as might be expected, an increased premium income, and losses below normal outside the San Francisco conflagration, and to this consolation I think all will agree we are entitled. As to what place the withdrawal from this field of so many companies and the re-writing of their business by others has had in the increase, it is still too early to make even an estimate, and the effect of the

GENERAL INCREASE IN RATES.

promulgated about June 1st, with a view to assisting in the early replacement of fire insurance assets distributed in this city

is also problematical. There has been some opposition to this increase from the public, but on the whole less than had been expected, insurers generally recognizing at once the necessity for a building up of fire insurance reserves as a basis for financial credit.

With the feeling that in your minds, as in my own, thoughts of the conflagration are uppermost, it has been my aim in the preparation of the programme for this meeting to secure papers bearing particularly on topics suggested by the San Francisco disaster. Our best thanks are due to the gentlemen whose names appear on our programme, for the time taken out of the whirl of our present business life and the care spent in the preparation of these papers. We are particularly obligated to those who are not members of the Association, but whose interests in its objects has been such that they too have made the opportunity to contribute to our pleasure and profit. I am sure our appreciation can be expressed in no more fitting way than by joining freely in any discussion which the reading of the papers may give rise to.

While I believe these contributions to our meeting will provide you with sufficient and opportune food for thought, I propose to take advantage of my prerogative to the extent of one or two comments on current conditions.

PUBLIC INQUIRY.

It cannot be denied that fire insurance has received more than ordinary attention during the past nine months. In these days of probing of all quasi-public corporations, it is not unnatural that the fire insurance companies should receive their share of public scrutiny, and especially as a result of the events of April last the public mind has been diverted towards the present fire insurance system as never before. Are we in a position to withstand this scrutiny? If perfection be required to find us not lacking, then the answer is "no"; if progress be required, then the answer is "yes," and it is by progress that any system should be judged.

Had our business not been progressive, and that along sound lines, it would long ago have been engulfed in that tremendous fire waste which is one of the features and one of the most dangerous features of this country's modern life, and of which San Francisco has furnished the crowning example. The Chicago fire of 36 years ago forced into bankruptcy more than one-half of the insurance companies

writing business in that city, while in San Francisco with two and one-half times the loss involved, 95 per cent of the companies have weathered the storm. This one point alone shows conclusively, I think, that we have made good headway in knowledge of what fire insurance should be.

There are problems confronting us, however, probably as perplexing as those of any time in the history of underwriting, and their solution it appears to me depends upon a constant repetition of the first principles of the business, both for our own benefit and for the benefit of the public.

INSURANCE IS INDEMNITY.

It sounds trite if I say to you, for example, that insurance is indemnity and indemnity only, and yet in a spirit entirely contrary valued policy laws are enacted by a number of the States. Again, it can hardly be disputed that the premium charges must of necessity cover the expense of the business, and yet in many States the companies are compelled by specific laws to pay out large sums for what seems to be useless and unnecessary work.

It seems right and fair that the company, on the one hand, should limit and define its liability by a properly worded contract, also that it should protect itself in the same manner against dishonesty on the part of the claimant, and it is right and proper that the State, on the other hand, should enact laws protecting its citizens against dishonest or unscrupulous companies. Both sides will doubtless admit that to go beyond this is unfair, unnecessary and mutually burdensome.

BURDENS IMPOSED BY THE STATE.

Every burden which the State places upon fire insurance is a burden felt by those requiring insurance protection, and yet in these days when any fancied wrong is the subject for a new statute, at every gathering of legislators in every one of our 46 States and five Territories new laws are enacted, new burdens imposed, for the most part without any clear understanding of the basic principles underlying our business.

It would seem that the enormous sums paid out by the companies to citizens of this State during the past eight months would have earned for them a respite from harassing legislation, but we must confess the outlook is not encouraging. Fewer rather than more laws are what is now required; laws based

upon a knowledge of what insurance is and what it is intended to do; laws which will encourage the investment of capital in the business rather than discourage it; laws which will have a tendency to add to rather than still further deplete the supply of insurance available to the public.

THE COST OF INSURANCE.

And the public are particularly interested in the cost of the security offered by the companies. While nearly all property owners pay for insurance, only about one policy-holder in thirty sustains a loss. It is therefore to be expected that the rating system will receive the larger amount of public attention, as in fact it should, for I think we cannot deny that in aiming at standard rates to be observed by all companies we are endeavoring to effect what we ourselves would call in other lines of business a monopoly. It is therefore incumbent upon us to show that our rates are just and equitable, or that we are progressing in that direction, and the public are entitled to be shown this.

It has been urged before at the meetings of this Association that we should lose no opportunity to educate the public, not only as to underwriting principles but also as to rating systems, and in advocating this I am bringing forward nothing new. I believe, however, it is something which should be repeated, and especially at this time of all others, while public attention is aroused. Let the field man make it his particular business to post the agent on the theory of insurance, on new tariffs, or on old ones, that the reasons for their being may not be forgotten, for they have good reasons for their existence, opinions to the contrary notwithstanding. The agent in his turn should be urged to freely communicate this information to his clients.

SCHEDULE RATING.

Take the Mercantile Schedule in use on this coast, for example. How few men outside the profession have ever heard of it, or appreciate the time and care spent in its compilation, as well as in its application. How many laymen are there who realize the pains taken to carefully differentiate in the rate between those classes of stocks which add to the hazard of a building and those classes which while adding nothing to the building hazard are hazardous in themselves. How few of the public, even among thinking, practical business men, have ever

been led to consider what the rate covers—the fire loss, the expense of conducting the business and the profit on the venture—and fewer still are those who realize what an analysis of

THE EXPENSE PORTION OF THE RATE.

reveals; taxes paid into the general expense fund of the State, assessments for the support of fire departments and fire patrols, charges for the maintenance of fire marshals and inspectors—all items of public character, and in the benefits of which all participate, insurer and non-insurer, and all properly chargeable to the general public rather than to the insuring public. It is a curious anomaly when the insurer pays for the public protection from fire which the non-insurer receives, but that is just what happens when the insurance companies are charged with the maintenance of fire protection.

BUSINESS PRINCIPLES.

Let the public have the facts about our rates and methods, and if any of these facts will not stand the light of day, or will not square up with standard business principles, then let us get in and eliminate them and substitute others that will.

I have always depreciated the idea fondly held and promulgated by some underwriters that the fire insurance company is purely a benevolent institution, organized solely for the public good. It is true it fills a public want, but so does the grocery store. Both are operated for profit, and both to be successful must be operated along sound business lines.

RE-INSURANCE.

Another feature which has less to do with public, but which has been brought very forcibly to our own attention as a result of the conflagration is that of the local interchange of re-insurance between the various offices. Some of the difficulties encountered in effecting satisfactory settlements of reinsurance accounts has long been foreseen, and their solution had been the subject of repeated debates in this Association, which had endeavored for several years past to secure the adoption of a general agreement covering the disputed points. Unforeseen difficulties, which I am free to say no agreement could have adequately covered, also intruded themselves. As a result of the numerous complications which have been met in the settlement of these accounts, there has been a general tendency to curtail

reinsurance and to limit agents to net lines. A moderate amount of reinsurance is perhaps both necessary and convenient, but I am satisfied that we are exceeding moderation, and should this tendency to curtail be encouraged, both by manager and field man, the resultant good to the business as a whole over the entire field would, in my opinion, be great. The practice of the writing of large lines by a company and their reinsurance on the street, down to that company's net retention has undoubtedly encouraged the appointment as agents of persons or firms whose only qualification as such was the control (generally as owner of the property) of some one large line, and whose only reason for accepting the appointment was the commission involved in that line. We have all made these appointments and have all decried them. With the discouragement of the practice of reinsurance there would be little incentive to the companies for the appointment of such agents, nor would the property owner in very many cases care to bother with the agencies of the ten or twenty companies necessary to carry his risk. In most cases the risk would go where it belonged—to the nearest legitimate agent competent to handle it, tending, I think you will agree with me, to the improvement of our agency system.

NON-PAYING CLASSES.

With the very natural increase in the amount of insurance carried, which is a result of every great conflagration, and the consequent demand for indemnity, the thought also suggests itself that the present is an opportune time for a careful reconsideration of our tariffs and rates, and especially those in what we are accustomed to look upon as non-paying classes, non-paying because the rates are too low. It would seem that the present opportunity to place such classes on the paying side of the underwriting account should not be lost.

Turning to those matters which are nearer home—the affairs of our Association—we find them involved in no small degree in the disaster which overlook our city, and withal during the year the Grim Reaper has not been idle.

George F. Grant and F. G. Argall have passed to the great beyond, yet while their part in our active business life has ceased forever there remains with us the memory of their good fellowship, their earnest interest in the affairs of this Association, and their devotion to their work in their respective spheres. I deem it only right, and it is with no less of love and respect for Mr. Argall if I particularly mention Mr. Grant,

whose infinite wit and most excellent fancy contributed for so many years to our enjoyment at these meetings. I can do little more than to echo those sentiments which the respective committees on memorial have expressed, and which will appear in the printed proceedings of this meeting.

THE ASSOCIATION.

As you are aware every vestige of the property of the Association was wiped out by the great fire. Our attractive and convenient library room, which through the courtesy of the Board of Fire Underwriters had been our home for only a little over a year, was entirely destroyed together with its contents, our valuable library built up as the result of years of faithful care, all of the records of the Association and mementoes suggestive of past events in Coast fire insurance. The Association is now practically in the position of having to start over again, but in this we shall have the inspiration, if indeed it be needed, of a great business community doing precisely the same thing.

In connection with our library,

"WHAT TO DO WHEN THE BOOKS ARE BURNED."

has been discussed many times on the floor of this Association. I think you will agree with me that one of our first duties is the rehabilitation of the library. Of late years it had come to be appreciated more in accordance with its value, and with its elaborate system of indexing answered almost any question put to it, either by those in search of material for papers to be read at our annual gatherings, or in relation to the every day problems of the business. Our business is steadily growing in complexity, is constantly putting forth new branches for the performance of special duties and functions, and many of these new branches, as well as the old ones, are developing, or have already developed a literature of their own. It is manifestly impracticable that any single office should have at its own command a reference library comprising with any degree of completeness the material now available and necessary for the proper study of those questions constantly arising in the daily routine of our business. It has been the privilege of this Association to supply this want to the insurance fraternity centered in San Francisco, and I feel sure I am voicing the sentiments of all present at this meeting when I say that it should continue to exercise this privilege. I am heartily in sympathy with the recommendation of the Execu-

tive Committee that the amount derived from our insurance be set aside for the purchase of library material. With the return of the business to a common center, convenient quarters should be secured, when a vigorous effort should be made to place the library in its old position of usefulness. The beginning has already been made, as you will have noted from the Secretary's report, and I am glad to take this opportunity to especially record the very generous donation of a complete set of the proceedings of this Association which has been made by one of our ex-presidents, Mr. Weinmann. Other donations will doubtless be made, and that they will be heartily welcome goes without saying.

THE SECRETARY.

As the work attending the building up of the library will be no small burden on the broad shoulders of our Secretary, I renew the recommendation made in previous years that a suitable assistant be appointed to be compensated as the Executive Committee think advisable. The office of Secretary should be an honorary one and its duties should be purely advisory and supervisory.

INSTITUTE WORK.

The very great success attending the experimental session of the Insurance Institute held in 1905 leads me to strongly urge that this new feature of our educational work be continued, notwithstanding its enforced interruption during 1906. The committee appointed at the last annual meeting found it unadvisable, in fact, entirely impracticable, to hold a session during the year in view of the scattered locations of the offices and the general state of the business in San Francisco, but there seems no reason to doubt that a session held in the coming fall will receive the same encouragement and command the same attendance as that of the year 1905. I may remind you that in that year 168 of the young men connected with the various offices were in attendance at the Institute, and that 60 were present at every lecture. I may also remind you that the Institute is self-supporting, with a good balance over and above expenses which becomes a part of the library fund. The work in 1905 was experimental, as it must continue to be for some time to come—the Association must feel its way in much of this ground which it attempts to cover, and we must necessarily expect that years will elapse before we can hope to equal in completeness of detail or in results

accomplished such older institutions as those of Toronto or Norwich. With the example of others before us and the material at hand we should be lacking in our appreciation of the opportunity if we failed to follow up the success of our first session.

It would seem, then, that there was plenty of work ahead for the Association, and hard work, too. By "hard work," I do not mean distasteful work, but earnest, concentrated effort, which in these modern days is the only kind of work that counts. Any Association must depend for its success upon the efforts of its individual members; therefore, this Association looks to each of you for assistance in some part of its work. And whether your work be for this Association, or whether it be in connection with the daily routine of your own business life, you yourselves are to be the final judges of its value. If a man be honest, he wants no sterner judge of the value of his own work than himself. If he be honest he requires no severer critic of his own work than himself, and

"When earth's last picture is painted,
and the tubes are all twisted and
dried,
And the oldest colors have faded, and
the youngest critic has died,
We shall rest, and faith! we shall need
it—lie down for an aeon or two,
Till the Master of all good workmen
shall set us at work anew."

I thank you, gentlemen. (Applause.)

The President then resumed the chair.

The President—Gentlemen, the address will be referred to the Committee under the motion made this morning by Mr. Dornin, which Committee I shall announce later on in session, and who will consider it in connection with the report of the Executive Committee.

Unless there is some further business before the Association, we will now proceed with the papers upon the program.

Mr. A. M. Brown—Mr. President, before proceeding to the papers, when we consider how nearly so many of us were shaken out of our boots, both literally and figuratively, on the 18th of April last, and when we consider the vast amount of work that every man in our line of business has been called upon to do

since that time, especially those who have had their duties in San Francisco, I believe that we all feel that this Association owes a special tribute to our President for his insistence that this meeting should be held at the present time, and for the energy he has displayed in gathering together the papers that we find are upon our program for this meeting. His excellent address is one that will ever be considered on a plane of excellence with any of those that have gone before. I feel that this Association owes to Mr. Kellam at this time more than the usual tribute for the work that a President of this Association has to do.

I know it is not customary to speak upon the President's address, but I would like to take this opportunity of saying something with reference to that part upon the education of the people as to the insurance business. Not only do I thoroughly agree with that, but I go even farther, and I say that the time for star chamber proceedings in our various rating bodies have gone past. People should know how their rates are made, and why they are made, and what they are for, as well as why there is a charge, for instance, for certain deficiencies and exposures and matters of that kind, and a deduction for certain matters of protection. They should know how the rates are made, so that when a rate is given them they will be satisfied that it is based thoroughly on the knowledge and years of training of those in the business. Until the time that such knowledge is general with the public, we shall always have trouble. When the people learn that their rates are made upon business-like principles, principles that have been evolved through years of hard work, there will be a very much better opinion held by the people towards us in the matter of rate-making than exists at the present time.

The President—We will now proceed with the program. The first paper was to have been one entitled "Some Facts and Figures," by Mr. William Maris, having to do with the conflagration. I have a telegram from Mr. Maris that he has been detained in Los Angeles on a rather troublesome loss, and we will therefore defer the reading of his paper until later in the session.

We will first listen, therefore, to a paper entitled, "Water Supplies for Large Cities," by Prof. C. G. Hyde of the University of California. I have the pleasure of introducing to you, Mr. Hyde.

Mr. Hyde—Mr. President and Gentlemen: I deem it a very great honor to be asked to meet with your Association today, and I appreciate very greatly the opportunity of presenting to you this paper on the water supplies of great cities. I have become greatly interested since coming here this morning in the scope of this organization, and I certainly must congratulate you upon the work you are doing.

THE WATER SUPPLY OF CITIES.
WITH ESPECIAL REFERENCE TO FIRE PROTECTION.

By Charles Gilman Hyde.*

It is the purpose of this paper to outline in brief and un-technical fashion some of the leading elements of the problem of providing communities with Public Water Supplies. Those features which are considered to be particularly important with regard to fire protection will receive especial notice.

DEVELOPMENT OF WATER SUPPLY ENGINEERING.

The design and construction of water works is by no means a recent undertaking among engineers, and during many centuries works of considerable magnitude have been executed and maintained in various parts of the world. The past century has been remarkable for its tendency toward the development of urban communities everywhere, perhaps especially in the United States. For these communities water supply systems have been demanded, and it has thus happened that the design and construction of water works have become a very important engineering branch, in which special training and knowledge is believed to be required as in other undertakings of an equally definite character.

It is only recently, however, that attention has been directed earnestly and understandingly to the necessity for providing for public uses waters which are wholesome and safe as

* Sanitary and Hydraulic Engineer, and Assistant Professor of Sanitary Engineering, University of California.

respects freedom from the germs of disease and from certain other injurious elements. Moreover, within the past few decades gratifying progress has been made in the science of hydraulics, particularly in those branches of this subject which concern the flow of water through pipes, in canals, over dams and waste weirs, and through porous materials, such as sand, etc., all of which are important features of water works (including purification) systems. Since 1850 notable advances have been made in the manufacture and protective coating of cast iron pipe, in the development of high-duty pumping machinery, and in the semi-standardized commercial production of many accessories of water works, such as small pumping units, valves, hydrants, etc., which enable the small works to be built economically. The extension of knowledge concerning the yield of watersheds, and the exploitation and use of subterranean sources of water supply, especially for small and medium-sized towns in the Middle West, but also in many other localities throughout the entire country, are to be noted as important steps in this branch of engineering.

The past fifteen years has witnessed a significant extension of engineering knowledge and a betterment of practice with respect to the protection of property against fire by the employment of individual water supply systems for isolated industrial and other establishments and of public high-pressure special services in the most congested and hazardous commercial and industrial districts of the larger cities. In one of our leading scientific institutions it is important to note that special technical training is being given to young men to fit them more or less specifically for the so-called field of fire insurance engineering.

Referring to local conditions, there can be no reasonable doubt that the great earthquake of April 18, 1906, has taught many valuable lessons in the matter of water works design, construction and maintenance. Certain unstable features of the then current practice were brought most forcibly into prominence, while, on the other hand, the inherent strength and stability of some important types of structures were exhibited in the most gratifying manner. If consistently heeded, as they surely will be by conservative and experienced engineers, the lessons taught by the disaster will undoubtedly result in producing greater dependableness in all that pertains to this important public utility and service.

While there are doubtless some unfortunate exceptions, in general it can probably be said that no longer are systems of water supply, which are selected and designed by competent

engineers, haphazard undertakings, but rather are the efficient and definite product of skill, judgment, and training. The modern sanitary engineer, who adequately handles problems of domestic water supply, must be able to blend a knowledge of hydraulics and mechanics with that of biology and chemistry and sanitary science in order to produce thoroughly acceptable results, judged by present day standards.

DEVELOPMENT OF SYSTEMS OF WATER WORKS IN THE UNITED STATES.

The first Water Works constructed in the United States for public purposes are believed to have been those placed in operation in Boston in about the year 1652, to furnish water from an elevated spring to the then small town. Prior to the year 1800 only 16 systems of public water supply are known to have been in existence. By the end of the century, in the year 1900, this number had probably been increased to 4150, and by the year 1910, extrapolating from certain curves showing past development, the writer estimates that there may be as many as 6600 complete systems of water works in the United States, furnishing water both for domestic purposes and fire protection to upwards of 7000 towns. In addition, there will perhaps be as many as 600 works, in other towns, serving for fire protection only. In 1900, the Twelfth Census enumerated 10,601 incorporated places in Continental United States, of which number probably 4400, or more than 40 per cent. were provided with public water supplies. These last figures are approximate only because in Massachusetts, Rhode Island, Connecticut, and perhaps certain other of the older States on the Atlantic seaboard, there are still many communities representing urban or semi-urban conditions which are provided with water works and other public utilities and which are not as yet incorporated. The writer has at hand no statistics to indicate the number of towns which would fall into this class, but it is believed that the data given above are sufficiently exact for practical purposes. For the country at large the available data indicate that in 1900 the great majority of incorporated cities and towns having a population of somewhat less than 1000 and upward were provided with more or less complete water works systems. In 1902, only 47 of the 1524 towns which, according to the census of 1900, had at least 3000 inhabitants, were without water works.*1

The following table has been prepared to exhibit the growth of water supplies and the population resident in towns provided with water works in the territory embraced by Continental United States from 1800 to 1895, with estimates covering the years 1900, 1905 and 1910.

Table N^o 1
Development of Systems of Public Water
Supply in the United States (1800-1905)

Years	N ^o of Supplies Introduced	Estimated Totals at Close of Periods		
		Supplies	Population in Towns Supplied	% Pop.* supplied
Before 1800	16	16	150 000	2.8
1800 - 1809	11	27	290 000	4.0
1810 - 1819	7	34	520 000	5.4
1820 - 1829	11	45	900 000	7.0
1830 - 1839	20	65	1 520 000	8.9
1840 - 1849	26	91	2 450 000	10.6
1850 - 1859	51	142	4 150 000	13.2
1860 - 1869	99	241	6 630 000	17.2
1870 - 1879	358	599	11 809 000	23.5
1880 - 1889	1268	1867	—	—
1890	207	2074	22 470 000	35.9
1891	161	2235	—	—
1892	182	2417	—	—
1893	201	2618	—	—
1894	259	2877	—	—
1895	302	3179 †	28 700 000 ‡	41.6 ‡
1900 Est §	—	4150 ±	35 200 000 ±	46.6 ±
1905 Est §	—	5250 ±	41 800 000 ±	50.8 ±
1910 Est §	—	6600 ±	43 800 000 ±	55.0 ±

* Estimated percentage relation between the gross pop in Continental U.S. and the total pop in cities and towns provided with public water supplies.

† The number here given is that of complete systems affording both domestic supply and fire protection. The total number of towns supplied by these works was about 3480. In addition, there were works affording a partial supply which brought the total to about 3940, representing all towns having some sort of a public supply.

‡ Per cent estimated on basis of population in 1890 in towns represented. This percentage applied to estimated total population in United States in 1895 to obtain figure given in column 4. The same figure was also derived from interpolated curves as below.

§ Exterpolated from curves representing past conditions and rates of growth.

The development of water works in that portion of the United States lying west of the Mississippi River has, during the past two or three decades, been remarkably rapid, and in the year 1897 it is estimated that fully 31 per cent. of all the systems of water works in the United States were within the territory in question. The percentage relation between the population in this region and that in entire Continental United States was then somewhat less than 28, showing that, in a general way, the demand for water supplies has been greater in the West than in the East, even though the Eastern communities are, of course, on the average, of much greater age. There are perhaps certain special physical reasons for this fact, such as the difficulty in certain localities of obtaining private supplies and the consequent necessity of combining to acquire public supplies. Nevertheless, the fact is of great interest to all who have to do with the water supply situation in the West.

Recent data for the Pacific Coast States are not immediately at hand, but it is believed that statistics would show a large proportion of the incorporated towns having at present more than 1000 inhabitants to be provided with water works, together with a considerable number having populations below this figure.

MODERN REQUIREMENTS OF A PUBLIC WATER SUPPLY.

The constantly increasing demand for more comfortable and for safer living, and the development among the people at large of higher sanitary and esthetic ideals, together perhaps with the influence of certain other conditions, are gradually combining to mould and crystallize opinion as to the essential characteristics of a supply of water for public uses. In order that a public water supply shall fulfill present-day and future requirements, it must be wholly satisfactory when judged by sanitary, esthetic, commercial and protective standards. The essential characteristics which may be broadly classified under the captions (A) Quality, (B) Quantity, (C) Dependableness (including fire protection) may be outlined as follows:

OUTLINE OF REQUIREMENTS FOR A PUBLIC WATER SUPPLY.

a. Quality.

- I. Primarily the water supply must be free from pathogenic or disease-producing organisms. More than this, it should probably be free from those allied organic forms which may not as yet be recognized as accompanying disease, but

which may nevertheless not be conducive to health. This condition of safety must prevail continuously and the supply must not be subject to what may be termed "accidental" contamination.

- II. The water must be uniformly clear and free from turbidity, both that which may be produced by suspended mineral matters, and also that which may be due to suspended organic (vegetable and animal) growths or impurities.
- III. The water must not be discolored by dissolved vegetable matters to such an extent that it may be objectionably apparent when employed for table uses or in the arts.
- IV. The water must at all times be free from both tastes and odors, either those produced by dissolved gases or those which may be due to the growth and decay of micro-organisms (minute plants and animals frequenting lakes, reservoirs and rivers, but usually prevailing to the least extent in the last named source).
- V. As far as possible the water should be cool and palatable.

b. Quantity.

- VI. The supply must be abundant and unfailing.

c. Dependableness.

- VII. The pressure under which the water shall continuously act in the distribution pipes must be ample to serve the various districts according to their specific character and needs.
- VIII. The system of works must be one in which design and construction may be executed in such a way that they may successfully meet conditions imposed by the natural phenomena occurring or likely to occur within the region in question.
- IX. The various structures in connection with these water works should be so located, arranged, built and protected that they may not be unduly exposed to fires or other accidents befalling neighboring structures.

The requirements which have been enumerated above are not more exacting than the principles of sanitary science,

esthetics, economics and safe engineering demand; in fact, as already suggested, they are only rational demands, upon which the public at large, gradually educated to higher ideals, will become more and more insistent as time goes on.

(A) QUALITY OF WATER FOR PUBLIC USES.

With respect to the matter of Quality, and with reference particularly to Item I, it may be said that there is no single fact in the science and art of sanitation which has been more completely demonstrated than the intimate relationship existing between public water supplies and public health. This relation between the appearance, on the one hand, of pathogenic organisms in water supplies and the consequent prevalence, on the other hand, of the diseases which are produced by these organisms in the communities using such supplies, is now very clearly understood, and to such an extent that certain diseases have very appropriately become designated as typically "water-borne." Among these, for the conditions now prevailing in the United States, typhoid fever must be considered to be by far the most important as it is also the most common. Next in order we might place dysentery, cholera (which happily has seldom in recent years been able to obtain foothold in the territory of Continental United States), diarrhoea, anthrax and perhaps others whose relation to this general matter has not yet been worked out very definitely, and in regard to which the opinion of sanitarians seems not to be wholly crystallized.

In Europe, for many years, a great deal of attention has been paid to the problem of securing wholesome and safe drinking water supplies. In America, unfortunately, in a very large number of cases, the problem seems to have been rather to obtain some water, regardless of its sanitary character. It is a hopeful sign, however, to note the increasing demands for sources of supply less subject to pollution and the gradual change on the part of many communities from impure sources to those which are safer and more wholesome. Recently so much attention has been directed to this matter that it is to be expected, in important instances at least, that future supplies will be selected with due regard to the several criteria outlined above and there will be fewer examples of failure, on the part of those concerned with the selection and design of works, to comprehend this important relationship between public water supplies and public health.

The several features comprehended by items I-V, inclusive, represent a particular field which it is manifestly inexpedient to discuss at greater length at this time.

There is, however, one further matter in this connection to which the writer desires to call attention. It is the provision so frequently made for pumping into or otherwise causing to enter the distributing pipe systems of towns, for temporary fire fighting purposes, an impure water from polluted sources. The cases referred to are those wherein the ordinary and usual supply may be reasonably pure and safe; but the auxiliary fire service may be derived from a neighboring water course, wholly unadapted to domestic uses. Such a procedure is attended with grave danger from the standpoint of health, and there are many authentic instances where epidemics of typhoid fever and other intestinal diseases have followed the employment of such waters for the purposes in question. It has thus unfortunately happened that the real loss (even when measured by the sordid standard of money alone) to the communities, due to the causing of sickness and to the destruction of life, may be greater than the saving of property due to the use of the more adequate fire fighting service. With the proper design of distributing reservoirs or storage basins—a leading function of which would thus be fulfilled—there is ordinarily no real necessity for resorting to polluted water for fire service. Thus at the same time public health may be conserved and the public safety may be equally well protected. When independent fire service mains are provided, into which such waters are forced, the objections to this character of water do not, of course, apply.

(B) QUANTITY OF WATER REQUIRED.

It is manifest that the problem of determining what shall constitute an adequate quantity of water for all purposes, both for the present and for the future, must always receive most careful consideration in all water supply projects. Upon this decision will depend the capacity of the works, and in a large measure their efficiency at times when the severest demands are made upon them.

Information with regard to the amount of water required for various types of municipalities is by no means lacking, and a very great volume of data has been accumulated during the past

fifty years, both with respect to supplies in the United States, and to those in other countries. In a general way it may be said that there exists today far more information upon the consumption of water in communities where all, or nearly all, of the water is pumped than in places where the supply is furnished by gravity from elevated sources. The reason for this is apparent in that the pumps serve as measuring apparatus, indicating without difficulty and within reasonably close limits the actual quantities handled. On the other hand, the determination of the quantity of water furnished by gravity supplies almost always involves the use of special measuring devices, the installation of which means the expenditure of an additional sum of money not otherwise required. Fortunately, however, this matter has recently come to be regarded as of sufficient importance to warrant considerable outlays for such apparatus, and many towns are providing themselves with such devices as the Venturi meter or the pitometer for this purpose.

Practical uniformity has been reached as to the method of expression of the consumption of water by communities, and in almost all cases this is given in terms of gallons per capita per day. The basic data are given with respect to the average consumption during each year. In addition to these basic figures percentage increments, representing variations from the annual average, may be and usually are obtained, being essential to the proper design of certain portions of systems of water works, such as, particularly, the distributing reservoirs and pipes. In this connection it is desirable to call attention to the fact that in the case of newly introduced supplies, wherein the water is available to only a small proportion of the population, the consumption per inhabitant does not indicate the real conditions of use on the part of each person served, and in such places the extension of the works gives an exaggerated rate of increase in the per capita consumption.*2

There are several leading conditions which influence the amount of water used in any community. First of these might be mentioned the manner of sale, whether by meter, by fixture, or some other arrangement. The abundance of the supply, its general availability, and the character of the water with respect to its satisfactory quality for all uses, both domestic and industrial, all tend to a lavish use of water. The use of water is influenced also by the character of the community as regards its industrial, commercial and residential development, and with respect to the wealth and habits of the people. The character

of the climate has in some cases an important bearing, not only upon the average quantities of water consumed during any continued interval, but also upon the maximum consumption during relatively short periods; thus, dry climates create the necessity for irrigating lawns and gardens and for frequent watering of streets and parks; hot climates tend to produce a waste of water from individual services to secure coolness; the appearance of extremely cold weather frequently brings about an enormous waste of water due to the intentional continuous operation of various fixtures in order to prevent the freezing of the pipes supplying them. The consumption of water on the part of any community is also influenced by the pressure, since high pressures usually cause greater leakage from pipe joints and fixtures and for various reasons tend to produce a more lavish use of water for many purposes. It is apparent that the quality of construction of the piping system has to do with the amount of leakage through the almost numberless joints required by present-day materials and methods of construction.

Contrasted with most European cities, American communities must be considered as exceedingly wasteful of water, the consumption per capita being frequently two to four times that required by similar municipalities abroad. Nevertheless, all of this excess of use in America must not be considered as waste, for a certain proportion of it is legitimate, due to the better and more general introduction of plumbing fixtures, even in the poorest houses, and to a greater use of water for industrial purposes, implying in some cases a smaller proportion of private supplies for such purposes under American conditions. The public use of water for street washing and sprinkling, for fountains, parks, etc., is generally less in American cities than in the cities of Europe.

Kuichling*3 has pointed out (as the result of averaging a large number of statistics of consumption during the year 1895 in upwards of 100 American and Canadian cities, classified in groups between certain assigned limits of population), that the average daily per capita use of water per year is apparently unaffected by the size of the city after a population of about 25,000 has been reached. Below this limit it is believed that the demand for water, upon the basis of the average daily use per inhabitant, is usually less and sometimes materially less than in cities of larger size. Of course there are frequent exceptions to this rule, but the general conclusion is rational, and to be expected from an analysis of the conditions affecting the use of water, as stated above.

Many attempts have been made by engineers, holding in review the experience of various cities wherein the demands for water seem to be more or less rational and wherein an excessive wastefulness does not obtain, to classify and arrange values for the rational average, maximum, and minimum use of water in communities provided with a fairly complete system of meters. Such figures arranged by Turneaure are given in the following table:

Table N^o 3
Table Showing Estimated Rational Use
of Water for Various Purposes in
American Municipalities

Use	Gallons per Capita Daily		
	Min	Max	Av
Domestic	15	40	25
Commercial & Industrial	5	35	20
Public (Municipal Uses)	3	10	5
Loss (Leakage, etc.)	15	30	25
Total	38	115	75

Where meters have not been introduced the consumption per capita is usually very much higher than in towns in which a large proportion of services, especially those supplying the largest consumers, are metered. Such results are to be expected so long as human nature remains as it is today and has ever been in the past. When the water is not paid for by volume, the average consumer has little personal interest in reducing waste. In fact, the general desire to get "one's money's worth" is in evidence in the water works field as elsewhere. As a general proposition, subject of course to certain exceptions, the writer feels that the use of meters (by reducing the waste and by restricting the use to more legitimate purposes, so that with a given size of main and a given available pressure, the velocity of flow is reduced and consequently the effective pressure is increased) must be regarded as an additional safeguard with

respect to fire protection wherever the water for fire service must be derived from the distribution system, and especially where fire engines are not uniformly employed.

Even with the general use of meters in any community the consumption of water per capita has not and probably will not remain at a constant figure, but it will always have an upward tendency due to the increasing legitimate demands for water for industrial purposes, for the arts, and perhaps even for household uses as the result of more and more luxurious living noticeable in all urban communities.

Studies by Freeman *4, in 1900, of data for 16 leading American cities in which meters have not been largely introduced, show that the average figure of daily consumption per capita per year has steadily increased from about 60 gallons in 1870 to nearly 140 in 1900. In 1870 the minimum figure for the cities in question was that for Newark, N. J., 13 gallons, and the maximum that for New York City (now the Borough of Manhattan), 74 gallons. In 1898 the minimum figure was that for Louisville, Ky., 70 gallons, and the maximum that for Allegheny, 239 gallons. Of course figures might be multiplied almost indefinitely, but it would appear to be unnecessary to discuss this topic further at this time. Table No. 4, however, is presented for the purpose of indicating for certain typical great commercial, smaller commercial and industrial, industrial, residential and suburban cities and towns the average annual per capita consumption for census years, 1860--1900, inclusive. Together with these figures are given the data of population and, where available, the facts concerning the per cent. of services to which meters have been applied with their consequent important influence in reducing waste.

In arid districts the per capita consumption is likely to be very great during the dry season of the year owing to the general use of water for the irrigation of lawns and gardens and, frequently also, for the cultivation of extensive tracts of land. In Southern California such instances are common and it is not unusual to find the dry weather consumption of water supplied by works of this class very many times greater than that of the wet season.

The various conditions operating to influence the use of water, as above indicated, produce considerable variations or fluctuations below and above the average annual figures of consumption for any given community. Thus there is a monthly

Table No 4
Some Statistics Relating to the Consumption of Water in American
Communities of Various Types - 1860-1900.

Name of City	Type of City	Year of Introduction of Works	1860			1870			1880			1890			1900		
			Population	% Serviced by mains	Per Cap. Cons.	Population	% Serviced by mains	Per Cap. Cons.	Population	% Serviced by mains	Per Cap. Cons.	Population	% Serviced by mains	Per Cap. Cons.	Population	% Serviced by mains	Per Cap. Cons.
New York, NY	Great Commercial	1799	805 700	—	342 300	70	1 204 300	3 2	6 9	1 515 300	20	70	2 650 600	20	111	11	
Chicago, Ill		1840	109 300	43	299 000	73	502 200	3 0	11 4	1 099 300	25	138	1 690 600	20	140	11	
Philadelphia, Pa		1801	565 500	36	674 000	55	841 200	6 9	1 047 000	0 3	1 31	1 293 700	0 6	262	11		
Brooklyn, NY		1858-9	266 700	12	386 100	11	47	500 700	16	34	806 300	2 6	6 8	1 166 600	1 8	97	11
St Louis, Mo		1830	160 800	—	310 900	35	350 500	—	73	451 800	8 2	72	575 200	—	111	11	
Boston, Mass		1848	177 800	97	250 300	60	302 800	4 0	87	448 500	5 0	83	500 900	3 0	102	11	
Cleveland, O		1854-6	43 400	14	92 800	33	140 100	5 9	65	201 300	5 8	106	381 800	4 9	135	11	
Buffalo, NY		1852	81 100	—	117 700	58	155 100	—	15	265 700	0 2	186	357 400	1 6	111	11	
San Francisco, Cal		1862-3	56 800	—	143 500	40	234 000	20	11	45	299 000	41 4	68	342 800	—	73	11
Cincinnati, O		1820	161 000	30	216 200	48	255 100	3 2	76	290 900	41	115	323 300	4 1	117	11	
Detroit, Mich	1827	45 600	52	79 600	64	110 300	—	130	205 900	21	161	205 700	10 1	167	11		
Milwaukee, Wis	1872-3	95 200	—	71 400	—	115 600	20	10 2	204 500	3 2	110	245 300	6 0	95	11		
Newark, N J	1800	71 900	—	105 100	14	136 500	—	67	101 800	10	84	244 000	2 2	104	11		
Providence, R I	1772	50 700	—	68 900	—	104 800	4 6	34	132 100	12 5	96	175 600	8 0	110	11		
St Paul, Minn	1870	10 400	—	20 000	—	41 500	—	—	133 200	4 2	60	163 100	2 8	31	11		
Rochester, NY	1872-6	48 200	—	62 400	—	89 400	5 3	61	133 900	11 4	62	162 600	23	121	11		
Denver, Col	1871-2	4 750	—	4 760	—	35 000	—	—	106 700	—	95	133 300	1 0	179	11		
Portland, Ore	1853	2 810	—	8 290	—	17 600	—	—	46 400	—	—	50 400	0 4	200	11		
Hartford, Conn	1854	29 200	—	37 200	66	42 000	—	94	53 200	—	—	79 800	27	104	11		
Duluth, Minn	1883	80	—	840	—	3 120	—	—	—	—	—	53 000	4 4	78	11		
Tacoma, Wash	1885	—	—	73	—	1 100	—	—	36 000	—	—	37 700	11	94	11		
Pittsburgh, Pa	1826	43 200	—	86 100	—	158 400	—	102	238 600	—	210	321 600	10	233	11		
Worcester, Mass	1845	25 000	—	45 100	49	58 300	7 1	52	84 700	8 4	39	118 400	9 0	62	11		
Syracuse, NY	—	28 100	—	43 100	—	51 800	—	77	88 100	—	—	108 400	4 3	76	11		
Fall River, Mass	1874	14 000	—	26 800	17	18	43 000	5 3	28	74 400	7 5	29	104 300	4 4	36	11	
Lowell, Mass	1872	36 800	—	40 900	11	25	59 500	13	38	77 700	23	69	95 000	5 1	83	11	
Grand Rapids, Mich	1840	8 080	—	16 500	—	32 000	14 4	39	60 300	13 8	66	87 600	—	—	11		
Lawrence, Mass	1875	17 000	—	28 300	4	42	39 200	8	48	44 700	29	62	62 600	77	33	11	
Harrisburg, Pa	1840	13 400	—	23 100	—	30 800	—	—	39 400	8 8	12 4	50 200	5 4	131	11		
Pawtucket, R I	1877-9	—	—	4 620	—	19 000	50	11	27 000	—	—	39 200	77	40	11		
Woonsocket, R I	1884	—	—	11 300	—	16 800	—	—	20 800	85	28	28 200	31	26	11		
Washington, D C	1850-9	41 100	—	109 200	127	147 300	145	188 900	0 3	158	218 200	27	174	11			
Los Angeles, Cal	1862	4 380	—	5 730	—	11 200	—	—	50 400	—	—	102 500	—	—	11		
Newton, Mass	1876	8 380	—	12 800	17	20	17 000	22	27	24 400	70	40	33 600	8 5	62	11	
Sacramento, Cal	1854	13 800	—	16 300	—	21 400	—	—	26 400	—	—	29 100	—	—	11		
Brockline, Mass	1875	5 160	—	6 650	—	8 060	—	70	12 100	14	12	19 900	4 8	32	11		
San Jose, Cal	1845	4 580	—	9 090	—	12 600	—	—	18 100	—	19 4	2 500	—	—	11		
Medford, Mass	1870	4 840	—	5 720	—	7 570	—	—	11 100	—	43	18 100	2 6	—	11		
Druidhan, Mass	1881	6 360	—	7 140	—	6 230	—	15	7 120	—	31	7 460	2	79	11		
Lu Crosse, Wis	—	3 820	—	7 180	—	14 500	—	—	25 100	—	—	28 900	0 1	193	11		
Milton, Mass	1885	2 670	—	2 680	—	3 200	—	—	4 280	100	27	4 580	100	31	11		
Wellesley, Mass	1884	—	—	—	—	3 130	15	23	3 600	18	71	5 070	30	47	11		
Nedham, Mass	1890	2 440	—	3 710	—	5 250	—	—	3 030	20	11	9 020	39	38	11		
Atlantic City, N J	1883	1 630	—	1 000	—	5 480	—	—	13 100	158	11	27 800	—	—	11		
Swampscott and Nahant, Mass	1885	1 910	—	2 320	—	3 310	—	25	4 080	—	56	5 700	1 2	111	11		
Collage City, Mass	1890	—	—	—	—	670	—	—	1 080	—	36	1 100	—	137	11		

¶ ¶ Boroughs of Manhattan and Bronx

¶ For 1815

¶ For 1883

¶ For 1894

** For 1877

†† For 1886

¶¶ For 1898

! For 1878

! For 1891

! For 1899

†† For 1880

†† For 1890

Per Capita consumption given in gallons per 24 hours

variation, a weekly, a daily and an hourly fluctuation in consumption. These variations affect the problem of storage in reservoirs or tanks, the provision of pumping facilities and, in some cases, the determination of pipe sizes. Moreover, it is important that a general knowledge of the laws governing these variations and their probable range shall be known, since the maximum or nearly maximum demand for water for domestic and other usual purposes is liable to occur occasionally at the same time as the maximum or nearly maximum demand for water for fire extinguishment. Although a very large amount of information is available with respect to the maximum values for the several periods above noted, it is probably unnecessary to burden this paper with any except general data relating to this subject. Such information, for communities of various types, has been prepared and is covered by Table No. 5, herewith.

The use of water for fire extinguishment, in terms of average daily per capita consumption, is usually very small indeed and scarcely worthy of consideration, being rarely greater than a fraction of a gallon per day. But the maximum requirement for a short period during the largest fires may be very great and may become for the period in question many times larger than the total use for all other purposes combined. This relative quantity obviously varies with the size of the town and the per capita use of water. As these increase, the additional demands for fire service become less significant.

As the result of a review of the experience of various cities along this line, it is possible to devise a general formula to express, in terms of gallons per capita per day, the maximum probable rate of use of water for fire service. This formula is:

Q (gallons per capita per day) = 1000 divided by the square root of X , where X = population in thousands. The impression implies the provision and use of an adequate number of fire streams, each of 250 gallons per minute capacity, in accordance with the estimate of Kuichling. (See Table No. 7.) On the basis of average per capita daily use of 150, 100 and 50 gallons, the following table has been prepared to exhibit the percentage excess of maximum fire service demands over and above the average requirements for other purposes.

Freeman*5 estimates that the duration of this maximum rate is seldom likely to be more than about six hours. Of course

WATER SUPPLY OF CITIES.

Table No 5
 Table Showing Percentage Relation of the Per Capita (Inhabitant) Consumption of Water During the Month, Week, Day and Hour of Maximum Consumption to the Average for the Year in Various American Communities

Place	Max Monthly			Max Weekly			Max Daily			Max Hourly		
	Max	Min	Av	Max	Min	Av	Max	Min	Av	Max	Min	Av
	Metropolitan District, Mass (14 cities and towns)	180	104	123	197	114	143	265	138	180		
67 towns and cities in Mass	271 218 216 196 187	111 113 114 114 114		318 258 253 250 249	119 119 125 125 126		592 482 480 419 367	147 150 150 151 155				
12 larger manufacturing cities in Mass			118									
1 suburban cities and towns in Mass			129									
33 smaller manufacturing cities and towns in Mass			129									
7 towns in Mass used as Summer Resorts			221									
16 American cities	139	107	118				194	116	149	333	168	226
Estimate by Farming for a suburban town			117			129			177			218

* Average for 5 years (1895-1899 inclusive)
 ** Average for 6 years (1895-1900 inclusive) The five highest and lowest percentages are given in columns of maxima and minima, respectively
 † Average for 1900
 ‡ Chicago Philadelphia, Boston Cincinnati, Cleveland, Buffalo, Newton, Fall River Dayton, Detroit, Milwaukee, Louisville, Columbus, Fall River Dayton, Newton, Pawtucket, Woonsocket, RI, Marquette, Mich
 § Average for 15 cities (as above, excepting Buffalo)
 ¶ Average for 14 cities (as above, excepting Milwaukee and Fall River)
 † For 3 cities only Boston, Detroit, Attleboro.

there may be important exceptions to this estimate, as for instance in the cases of the well-known disastrous fires in Baltimore, Boston, Chicago and San Francisco, which were prolonged far beyond the limit above assigned. In a rough general way, it may be said that the larger the city, the longer becomes the possible duration of maximum fire service requirements. Reference has already been made to the fact that maximum or nearly maximum demands for other purposes may require to be met simultaneously with those for fire extinguishment, although in the case of a very great and widespread disaster, the requirements for general purposes may be almost altogether suspended. In such instances, however, this reduction in general demands will hardly compensate for the increased demands for fire extinguishment, which for the case assumed would probably be much greater than indicated by Table No. 6.

Table N^o 6

Table Showing for Communities of Various Populations the Estimated Percentage Excess of Maximum Fire Service Demands Over Those for All Other Purposes Combined When These Are Represented by 50, 100 and 150 Gallons per Capita per Day per Year

<u>Population</u> <u>of Town</u>	Percentage Excess of Max fire demands over those for all other purposes combined, when average daily per capita consumption equals		
	150 galls	100 galls	50 galls
1 000	667 %	1000 %	2000 %
5 000	298 "	447	890 "
10 000	211 "	316	630 "
50 000	94 "	141	280
100 000	67 "	100	200
200 000	47 "	71	142 "
300 000	39 "	58 "	116 "
500 000	30 "	45	90

Several engineers, some of whom have had a wide experience in these matters, have attempted to estimate upon the

maximum number of fire streams which may be required simultaneously in American cities of various sizes; and upon the basis of the numbers thus determined, they have estimated the quantity of water in gallons per minute required for fire service. Table No. 7 has been prepared to cover such estimates, particularly those of Messrs. Freeman and Kuichling.

Table No 7

Table Showing Estimated Maximum Number of Fire Streams Required Simultaneously, and Quantity of Water for Fire Service in Gallons per Minute Demanded by American Cities of Various Magnitudes.

Population of Community	Number of Fire Streams required simultaneously *				Gallons per Minute estimated by Freeman
	Freeman	Fanning	Shedd	Kuichling	
1 000	2 - 3	—	—	3	350 - 750
4 000	(4 - 6)	7	—	6	(700 - 1500)
5 000	4 - 8	—	5	6	700 - 2000
10 000	6 - 12	6	7	9	1050 - 3000
20 000	8 - 15	—	10	12	1400 - 3750
40 000	12 - 18	—	14	18	2100 - 4500
50 000	(14 - 20)	14	—	20	(2450 - 5000)
60 000	15 - 22	—	17	22	2625 - 5500
100 000	20 - 30	18	22	23	3500 - 7500
150 000	(24 - 36)	25	—	34	(4200 - 9000)
180 000	(27 - 40)	—	30	38	(4725 - 10000)
200 000	30 - 50	—	—	40	5250 - 12500
250 000	—	—	—	44	—
300 000	—	—	—	48	—

* Kuichling, Trans Am Soc C E, 1897, vol XXXVIII, p. 15
(—) = interpolated

Such a table as that given above should be used with very great caution, especially with respect to the smaller communities. The figures must not be applied blindly but due consideration must be given to the character of the town, to the number of buildings of considerable size, the danger of fire in such structures, the proximity of these buildings, etc. This matter

may be better understood by considering two communities of, say, 4000 inhabitants each. One community may be suburban in character and comprise simply residence property with a few unimportant business blocks, usually centralized but the result and not the cause of the development of the town. The other may be an industrial community wherein the interest of most of the people is centered in a few establishments to which the town owes its development. In the latter case any one or all of these establishments will require a number of fire streams considerably in excess of that demanded by the average town of the same size, while the first named community will require a smaller number of fire streams, operating simultaneously, than average conditions would appear to dictate.

Speaking generally, it may be said that in closely built up districts, two-thirds of the total number of fire streams given in the above table for communities of the sizes in question, may, according to Freeman, require to be "centered upon any one square in the compact valuable part of the city or upon any one extremely large building of special hazard." For residence districts it is probable that ordinarily not more than one-fourth to one-half of the number of streams given in the table will require such concentration.

It appears to be the function of fire streams to chill the burning materials to the point where no combustible gases are given off. In other words, a fire stream does not ordinarily put out a fire by wetting the flames, which are really the result of the heating of the material until gases are given off and then the burning of those gases. It is thus apparent that for serious fires in which the flames have made considerable headway, large fire streams and not small ones are absolutely essential. Small streams are vaporized by hot fires and tend to augment, rather than to reduce, the conflagration. For ordinary service in business districts a fire stream of 250 gallons per minute is considered to be reasonably satisfactory. In a residential district a stream of 175 gallons per minute, but not much smaller, may be used. In connection with special high-pressure fire service systems, to be later discussed, much larger and more forcible streams are generally employed.

The loss of water through the breaking of large service pipes in small or even large communities may have an important influence upon the quantity and pressure available for fire extinguishment. This is an especially important matter in earth-

quake districts as was so significantly shown by the experience of San Francisco during the days following the earthquake of April 18, 1906.

(C) PRESSURE AND OTHER REQUIREMENTS.

Pressure Requirements, Item VII. The question of providing suitable pressures throughout the various districts of a given community is, of course, of immense importance in that it relates most prominently to the satisfaction of ordinary use and to the efficiency of fire protection.

In general it may be said that the more highly developed a district becomes, the greater are the pressure requirements. The modern high office or other building requires a very excessive working pressure in order to force water to the topmost floors. Such pressures are frequently not obtainable in the cities or districts of cities in which such structures exist. As a result of this circumstance such buildings frequently require auxiliary independent pumping systems. Certain districts in the lower portion of the Borough of Manhattan, New York City, are striking examples of the existence of this condition which has aroused no little comment and criticism. When the demands for water during the daylight hours are heaviest, the pressure in the mains is altogether inadequate to supply the upper portions of even moderately high buildings, and it has, in most cases, been necessary to install elevated tanks from which the supply may be drawn whenever the pressure falls below a certain limit.

With increasing age of a water works system, the pressure at any given point is likely to decrease to an important extent owing to the greater draft upon the pipes and to the increased roughness of their interior surfaces. If direct pumping is resorted to, which is seldom the case in the larger cities, this condition may be obviated by gradually increasing the pressure under which the pumps operate.

The demands of ordinary use of water for domestic, industrial and public purposes, require for the most part comparatively slight pressures, particularly in the smaller cities. Fire service, on the other hand, requires a very high pressure, greater in important business districts than elsewhere. In residence districts requirements other than those of fire service are satisfactorily met with from 20 to 30 lbs. per square inch minimum pressure and in business districts with from 40 to 60 lbs. pressure. Districts in which the highest office building are to be found or are likely to be constructed should, whenever possible,

have minimum pressures of not less than 100 lbs. per square inch.

It will be seen that the above figures are entirely inadequate for direct fire service in the various districts, this service, as already stated, requiring a high pressure to furnish good fire streams through reasonable lengths of hose. Moderate pressures are usually required to insure adequate supply to fire engines without producing negative pressures in the mains and thus denying all supply for other purposes.

Fire pressures in residence districts should never be less than, say, 50 lbs. per square inch, while 70 or 80 lbs. are much more favorable. In commercial districts 75 lbs. must be considered a minimum and 100 lbs. per square inch a much better and safer pressure. These pressures permit the hydrant spacings to be more economical and satisfactory while at the same time adequate fire streams are furnished. Pressures continuously greater than 125 or 150 lbs. per square inch are undesirable in distribution systems since pipe breakage becomes much more frequent and the restriction of leakage much more difficult than would otherwise be the case. Where separate fire systems with independent pumping machinery and specially designed pipes and appurtenances have been installed, the working pressures during fires are always very much greater than those indicated by the figures above.

In the congested districts of small towns the hydrant pressure should always be sufficient to furnish fire streams of from 175 to 250 gallons per minute through 300 to 400 feet of ordinary 2½-inch hose. When this is impossible of achievement, fire engines will be required. In large cities, unless special high-pressure systems are provided, fire engines are almost always necessary for those parts in which the highest buildings exist, or those in which structures of especial hazard are to be found.

Safe Design and Construction, Items VIII and IX. It does not appear needful to discuss in detail the subjects introduced under these items, but rather to indicate certain broad features only which may effect the dependableness of the works in question. It may be said that the general characteristics classified as (B) and (C), Quantity and Dependableness, relate to the physical conditions of satisfactory and safe service and therefore must be more or less immediately concerned with the protection against fire afforded to communities by water works.

Item VIII suggests that the decision with respect to the type and nature of a system of works will sometimes be determined by local conditions and by the liability to damage due to such natural destructive local occurrences as cyclones, cloudbursts and earthquakes. Cyclones generally affect only aerial structures such as standpipes, chimneys appurtenant to pumping stations, etc. Cloudbursts are frequently the cause of disastrous washouts, which may incapacitate or destroy trestles or bridges carrying pipes and conduits connected with water works systems; also the floods produced by them may destroy earthen and other dams and similar structures where inadequate spillways have been provided. The effect of earthquake may be felt in various ways by most of the structures appurtenant to water works, and in view of the recent disaster and its far-reaching effects, it is deemed of sufficient importance to devote a separate section of this paper to a discussion of this subject and to the means which can be applied to avoid future disasters from this cause.

As a very general statement it may be said that simplicity in water works design and construction, as elsewhere, provided the system is complete, lends to easy, efficient and safe operation.

Item IX is self-explanatory since it relates to the fire hazard of important structures connected with systems of water supply. It is evident that isolated pumping stations and other similar structures are safer in this respect than those in closely built up districts. Water works structures located in congested districts should manifestly be designed as nearly fireproof as possible.

SOURCES OF PUBLIC WATER SUPPLY IN THE UNITED STATES.

The sources from which public water supplies are derived naturally fall under two main classifications: (a), Surface Waters and (b), Ground Waters. Each of these may be further subdivided as follows:

TABLE NO. 8.

Sources from which Public Water Supplies may be derived.

a. Surface Waters.

- 1.—Small streams with storage reservoirs.
- 2.—Ponds and lakes.
- 3.—Large rivers whose minimum yield is greater than the maximum draught upon them in any locality in question.

b. Ground Waters.

- 4.—Springs with adequate covered receiving reservoirs.
- 5.—Deep and artesian wells.
- 6.—Bored, driven and dug shallow wells.
- 7.—Galleries and tunnels.

Under class (a), surface waters, might be mentioned the use of rain water collected in cisterns from roofs, etc., and employed by very small communities or by isolated dwellings and other establishments. Many cities in the United States employ combinations of the above enumerated sources and do not depend upon any one single source.

The fact that a constantly greater personal interest attaches to all questions relating to the public health, which in turn is so intimately associated with the public welfare, induces the writer, even at the risk of rendering this paper unduly long and of passing somewhat outside of its more immediate scope, to refer briefly to the relative safety of drinking the waters derived from the various sources above enumerated. It has already been stated that typhoid fever is the most important and prominent typically "water-borne" disease now prevailing in the United States. It is true that typhoid-fever gains entrance to the human body through other media than the drinking water; but none of these sources of infection is so wide-spread nor so continuously operating. A careful analysis of statistics shows that, for the larger places especially, the continued prevalence of typhoid-fever is a relatively accurate index of the sanitary quality of the water supply. It is therefore apparent that the relative prevalence of typhoid-fever in cities provided with public water supplies using different types of sources, must indicate quite closely the relative safety of those sources from a sanitary point of view. It is to be observed that this condition is not due to any inherent difference in the character of these waters in their normal or natural condition but rather it is the result of their relative liability to infection from a more or less direct exposure to the contaminating wastes of human existence. A vast array of statistics has been gathered in the past with reference to the prevalence of typhoid-fever and other diseases in different communities and several engineers have made painstaking compilations of these data with a view to indicate the prevalence of the disease in question in cities supplied as above stated with water from different sources. Fuertes 6* has, perhaps, made one of the most careful compilations along this line, and from his studies the writer has prepared the following table, which is believed to be self-explanatory and to require no further discussion:

Table No. 9.
Table Showing The Relative Prevalence Of Typhoid fever In Cities Provided With Public Water Supplies From Different Types Of Sources.

Class	Type of source from which supplies are derived.	Description	Number of Cities included by class	Aggregate population of cities included by each class, 1895- Est.	Typhoid fever death-rates per 100 000 in cities of each class					
					Per cent more than, col. 5	Per cent less than, col. 6	Per cent between, col. 7	Per cent between, col. 8	Average rate, col. 9	
col. 1	col. 2	col. 3	col. 4	col. 5	col. 6	col. 7	col. 8	col. 9	col. 10	
1	Mountain springs with sources beyond danger of pollution	2	1 720 000.	—	—	—	—	—	6	1
2	Waters efficiently and properly purified by filtration	12	9 992 000.	94	3	83	20	77	3	20
3	Pure ground-water supplies, artesian etc., from non-populous regions.	10	4 676 000.	98	5	77	32	75	5	32
4	Surface water supplies protected by large impounding reservoirs and legal enactments.	15	7 120 000.	97	15	80	35	77	15	35
5	Large normal rivers or those in which pollution has been reduced by national agencies.	9	1 610 000.	90	17	85	38	75	17	38
6	Large inland lakes more or less subject to pollution	7	2 910 000.	93	18	80	54	73	18	54
7	Upland streams and small lakes with limited watersheds, more or less uninhabited	11	1 652 000.	92	29	80	58	72	29	58
8	All sources directly contaminated with sewage inflow.	21	4 776 000.	95	40	—	—	65	50	800

Notes.

No city is included in above statistics whose est. population in 1895 was less than 50 000. The statistics of this table are for the years 1890-1895, inclusive. Compiled largely from *Fuentes Water and Public Health, N.Y., 1896*

The character or type of source also, perhaps, has a certain bearing, though more or less remote, upon the problem of fire protection, since certain sources, such as ground waters, imply the use of pumping machinery requiring supervision and care in maintenance and an adequate provision of excess capacity for fire service, which is not always carefully considered and accomplished. Furthermore, certain types of sources are less adapted than are others to the yield of large quantities of water in excess of the usual requirements even though the duration of such demand be short. For such sources it is evident that greater reservoir capacity should be provided.

Reviewing current water works practice and experience, the writer believes that from the standpoint of general dependability with reference to fire protection, the sources should be ranked in the order in which they have been enumerated above. This statement is intended to apply to average conditions. It should be apparent that it is perfectly possible to so design and construct individual works, taking water from any one of the given sources, that they may be wholly, and perhaps almost equally, reliable.

In this connection it is interesting to observe that in 1897 about two-thirds of all of the public water supplies in the western states, (i. e. west of the Mississippi River) were derived from the ground.

TYPES OF WORKS.

Water works may be divided into two main classes: (1) Gravity Works, (2) Pumping Works. Many cities and towns employ combinations of these classes.

(1) Gravity works are those which derive their supply from elevated sources (usually from natural lakes or artificial storage or impounding reservoirs) and conduct it in pipes or other channels by gravity to the point of distribution.

(2) Pumping works are those in which pumping machinery is required to raise the water from ground sources or low lying rivers and other bodies of water. Three arrangements of pumping works are in vogue to-day, as follows:

(a) Works in which the water is pumped directly to a distributing reservoir or elevated tank from which it flows to the consumers by gravity. Such systems are sometimes called by engineers "indirect" pumping systems.

(b) Works in which the water is pumped directly into the distributing system, but in which an elevated reservoir

or tank is provided to receive the surplus from the pumps when these are operating more rapidly than the service demands or, on the other hand, to yield from storage whenever the rate of pumping falls below the rate of consumption or when the pumps are stopped altogether. Such reservoirs, as in (a) also, thus serve as compensating media whereby the pumping may be conducted more uniformly and economically, and, in case of accident to the machinery, the community can be supplied with water by gravity during a reasonable length of time. Such systems may be termed "direct-indirect" pumping systems.

(c) Works in which the water is pumped directly and only into the distributing pipe system and wherein the pumps are operated continuously day and night at the same rate as the draught upon the pipes. Such systems are called "direct" pumping systems.

From the standpoint of inherent dependableness there is usually no doubt that gravity works are more reliable, since when once properly constructed and consistently maintained they involve less of the human element than works requiring machinery. However, this is a very general statement which must not be applied to any individual instance, but rather must be understood to refer to the average case. In arid or semi-arid, or in newly developed territory, where the meteorological conditions are not well understood, impounding reservoirs may prove inadequate and at the end of a dry season may be drawn too low to give good fire pressure or to furnish a sufficient quantity of water, or both. Moreover, poorly constructed dams and embankments (usual features of impounding and distributing reservoirs) are always dangerous structures, but well designed and well constructed earthen and masonry dams and embankments are among the most stable engineering works in existence. Definite and positive proof of this statement was furnished in this vicinity by the earthquake effects of April 18, 1906.

It is a notable fact that great progress has recently been made in the design and construction of pumping machinery, and there is now little excuse for building unreliable, inefficient and inadequate pumping plants. That such are in existence today in many places is, of course, true, and in such places the protection against fire is correspondingly precarious.

For generally safe and satisfactory operation, the writer believes that the order (a), (b), (c) given above represents the rank which the three systems of pumping should occupy. Un-

der ordinary circumstances there may be little choice between the "indirect" and the "direct-indirect" systems, but it is unquestionably true that the "direct" method is to be condemned for the majority of conditions existing in municipalities today. In addition to the fact that they are uneconomical, direct pumping systems usually do not permit of a sufficiently quick and adequate response to sudden demands, as in the case of large fires making rapid headway. Direct pumping in connection with large systems is probably to be considered much less hazardous than with smaller works due to the greater uniformity of demand and to the smaller relative increase of requirements for fire service in the case of the former. Furthermore, in large plants the machinery is generally of a more efficient and dependable character and the condition in which it is maintained is usually more satisfactory. In "direct-indirect" systems of pumping there is an opportunity during fires to cut off the distributing and compensating reservoirs after they have performed their service in furnishing water under a certain head (which may not, however, be as great as is desirable) during the period required to put auxiliary pumping units into operation. When this is accomplished, and the reservoir has been cut off, the pressure from the pumps can be temporarily increased within the distributing system, thus allowing of better fire streams. It is apparent that in such cases the pipes must be designed for this increased pressure, and the total pumping capacity must be equal to the maximum demands.

THE PROBLEM OF STORAGE OF WATER.

In connection with systems of water supply, water is artificially stored in two principal ways: 1st, in impounding reservoirs; 2d, in distributing reservoirs, stand-pipes, elevated tanks, etc.

It is the function of impounding reservoirs to make up the deficiency in yield of a given watershed, used as a source of supply, during the entire period in which such yield will fall below the anticipated draught. This draught is not only represented by the amount consumed for water supply purposes, but also comprehends a certain additional amount to cover losses through evaporation, seepage, etc., and to satisfy such riparian and other rights as may exist. Variations in consumption, with the exception of yearly and sometimes of monthly variations, affect the capacity of impounding reservoirs very slightly since this frequently represents the entire anticipated draught upon them

through a period of from 6 months to 2 or 3 years, or even a greater length of time. It is apparent that very careful estimates of the yield of watersheds must be made whenever the total annual draught approaches somewhat nearly the minimum yearly yield of the drainage basin tributary to the point of diversion. It is also important that the manipulation of the basin be such as to utilize to the fullest extent, in such cases, the flood waters. These principles apply to natural storage in the same manner as to that artificially secured.

Distributing reservoirs, stand-pipes, elevated tanks and underground cisterns, on the other hand, have for their primary purpose the storage of water for use during fires and the rendering of the work of pipe lines and pumps more uniform and economical. When impounding reservoirs or other sources, supplying a given community by gravity, are near at hand, it is frequently possible to dispense with distributing reservoirs, provided the capacity of the conduit from the source to the distributing system is ample to fulfill the combined maximum requirements of fire service and other uses. Such an arrangement, however, requires careful watching so that supplementary mains may be added before the existing ones become too small for maximum requirements. Long conduits or pipe lines always demand distributing reservoirs for emergency service; and the longer and more complicated these pipe lines become, the larger relatively should be the capacity of the reservoirs immediately adjacent to the distributing system. Whenever possible the capacity of distributing reservoirs, tanks, etc., should represent several days' supply. Their absolute minimum capacity should be equal to the maximum total draught during the period of time required for the repair of those structures supplying them, which are liable to accident or injury, or, in some cases, a volume which may represent the lack of capacity of conduits or pumps to supply the maximum demand for water during a stated period.

Elevated tanks and stand-pipes can rarely be constructed at a reasonable cost to fulfill the rigid requirements outlined above, and even if ample in the beginning, their capacity is finally liable to represent only a few hours of storage of the maximum requirements for fire service, etc. As an absolute minimum they should have a capacity representing maximum fire demands during the time necessary to place the required number of pumps in operation. If the pumping capacity is less than the maximum fire service requirements, provision for additional storage must be made in the tank or stand-pipe.

It is manifest that distributing reservoirs, tanks, etc., must never, except in most extraordinary cases as the result of severe fires or other accidents, be entirely emptied. In other words, at all ordinary times, the capacity below low water mark must represent an adequate surplus for fire service. That this principle is not always adhered to by water works managers is well known to all who have made a study of water supplies, particularly in rapidly growing communities where it is difficult to enlarge the various parts of water works systems as rapidly as the demands for water increase. For instance, the writer has seen in California distributing reservoirs, which during the rainy season were full of water and apparently most adequate safeguards in case of fire, drawn completely empty at the end of the dry season. The significance of this condition is apparent.

THE DISTRIBUTING SYSTEM.

It should have become evident from the discussion thus far that certain parts of water works systems are normally designed with reference to the average daily consumption at some assumed future date while other parts are designed almost entirely with reference to the probable maximum demands for fire service at that time. Thus, in considering the capacity of an impounding reservoir, fire service requirements have little or no bearing; but in the design of distributing reservoirs, and particularly of distributing pipe systems, the problem of fire extinguishment and the quantity of water required for this service become of paramount importance. These latter considerations, in most cases, govern the sizes of pipes in the streets, since these must be sufficiently large to admit of concentration of great volumes of water at some definite point or points.

The materials generally utilized for distribution pipes are cast iron, wrought iron, and wood, the last being used in the form of staves or bored logs. There absolutely can be no question that cast iron represents by far the most dependable and, under ordinary circumstances, the most durable material for distribution systems and has become practically universal in the largest and best systems of works in this country and abroad. Lap-welded wrought iron or steel pipes are, under certain conditions, very satisfactory when of proper size, but service connections are made with greater difficulty than in the case of cast iron pipes. Spiral or other riveted steel or iron pipe is not to be commended for this service. In modern water supply systems with moderately heavy pressures, wooden pipe, either of

staves or of bored logs, requires to be specially banded or wrapped with wire or flat bands of steel or bronze. While experience is somewhat conflicting, it appears that such pipes often fail due to the corrosion of the metallic wrappings or to the decaying of the wood, or perhaps more especially to the effect of water hammer in creating such pressures that the bands are pressed into the wood and the joints are opened, allowing of leakage.

The hydraulics of large distributing systems are somewhat complicated since it is usually impossible to determine by just what routes the water will reach a given point. Under ordinary circumstances there is no question that a diameter of 6 inches should represent the absolute minimum size of pipes in distribution systems. An exception might be made with respect to the extreme borders of the smaller towns where for a long time in the future it is certain that further extensions will not be made and that isolated dwellings, only, will be found. In such cases 4-inch pipes may be used. In all main streets and principal thoroughfares the size of pipe will depend upon the total requirements, and it is impossible to lay down any definite rule for such cases. Whenever a question arises as to the adequacy of such pipes in an existing system the whole subject should be investigated and careful studies made by a competent hydraulic engineer.

The fact that the service must be general throughout the built up section of any municipality requires that pipes be placed in each street. In all cases distribution systems should be laid out in the so-called "gridiron" plan in which, wherever possible, junctions are effected at all street intersections. This procedure involves the use of somewhat more pipe of the smaller sizes than would be required if the laterals stopped at some distance from the street corners. Nevertheless it has become standard practice from the fact that "dead ends" are thereby avoided. These are objectionable in two ways: they prevent circulation and tend to produce stagnation at the extremities of the pipes; they limit the number of routes or paths by which the water may approach any district and therefore decrease the quantity of water and the pressure available in all times, but these features become of special significance in emergencies, as in the case of fire. The practice would seem to be peculiarly advantageous for obvious reasons in districts where earthquakes are liable to destroy the pipes at certain points or in certain sections. The location of principal and auxiliary mains will de-

pend altogether upon the number of fire streams required in a given portion of the town in question, upon the general location of important districts, of those requiring greatest pressures, of those having the greatest fire hazard, etc.

When the topography of a town is such that great differences in elevation exist it is apparent that with a single system of distribution pipes adequate pressures at the higher levels may involve undue intensity of pressure in the lower districts. Such conditions frequently make it desirable and sometimes necessary to adopt separate zones whose distribution systems shall be independent. Such districts are frequently supplied from different sources or from different reservoirs fed from the same source. In some cases a gravity system may be used for the lower levels and a pumping system for the higher sections. In most cases it will be found desirable to provide emergency connections between the several distribution districts.

An immense amount of damage is annually caused to metal pipes laid in the streets in many cities of this country due to the existence of parallel electric transportation systems, whose rails are imperfectly bonded. The return current, instead of passing along these, is caused to enter the ground and seek lines of least resistance back to the power plant. Water pipes, as excellent conductors of electricity, suffer greatly from the fact that electrolysis is set up and the pipes are corroded and gradually destroyed at all points where the current leaves them. This may take place at any joint, or may occur at particular locations only, according to the relative conductivity of the surrounding material, the amount and voltage of the current, etc. From the standpoint of dependableness for fire and other service, the principal consideration is with regard to the possibility of rupture at points where maximum disturbances by electrolysis have occurred, and to the consequent failure to furnish adequate quantities of water in times of emergency. So far as the writer is aware, there is but one absolutely sure method of preventing all electrolytic action on pipes in the neighborhood of electric transportation systems, and that is a most careful bonding of the rails, or better, the provision of a double trolley or an uninterrupted underground copper return circuit throughout the districts where electrolysis is being or is likely to be caused. Other water works structures, especially steel stand-pipes, have occasionally been injured by electrolysis, and in one notable instance failure was due to this action.

CERTAIN APPURTENANCES OF WATER WORKS SYSTEMS.

Hydrants.

The location of hydrants within any given district is largely determined by the fire hazard and the number of streams which it is required to concentrate within such district. The pressure in the mains also affects the problem since the smaller the pressure, the closer must be the hydrant spacing in order that the lengths of fire hose shall be reduced and the pressure and volume of fire streams be maintained. In a rough general way, it may be said that hydrants in sparsely built up residence districts should seldom be more than five or six hundred feet apart, while in congested districts of special hazard they may require to be not over one hundred or one hundred and fifty feet apart.

Cities should adopt a uniformity in the placing of hydrants with reference to street or curb lines so that they may be readily found, especially those known as flush hydrants which are entirely below the street or sidewalk surface, and are concealed by cover plates.

A good deal of information has been gathered by engineers, particularly by Freeman, with regard to the loss of head by friction in various kinds of fire hose and various sizes of nozzles. It is considered to be undesirable to burden this discussion with such figures which are readily available in most books relating to hydraulics and water supply engineering *7. Suffice it to say that with 100 lbs. per square inch pressure at the hydrant, a 250 gallon per minute stream can not be obtained with more than 300 feet of 2½ inch hose and a 175 gallon stream with not more than 700 feet of hose. With a pressure of 75 lbs. per square inch at the hydrant, a 250 gallon fire stream can not be obtained with more than 200 feet of hose, nor a 175 gallon per minute stream with more than 450 feet of hose.

Head in feet may be converted into pounds per square inch by multiplying the first by 0.434; and conversely, pressure in pounds per square inch may be expressed in terms of head in feet by multiplying the pressure by 2.3.

Many studies have also been made to determine, for the generality of cases, the optimum size of fire stream. For congested districts it may be said that a 250 gallon per minute stream represents standard practice and in residential districts a stream of 175 gallons per minute is usually satisfactory. In connection with special fire service systems, in which very high pressures are employed, hose and nozzles of greater diameter and streams of considerably greater capacity, say of from 300 to 1500 gallons

per minute, are frequently found to be practicable and desirable. With a given hydrant pressure, length and size of hose, the nozzle frequently must be chosen with reference to the distance and height to which the resulting water jet may be thrown rather than to the volume of water which will be discharged.

Hydrants are made with from one to four connections, usually for 2½ inch hose, but special hydrants for high pressure fire service are now used with-connections as large as 4 inches in diameter. Under certain conditions it is desirable to provide hydrants with one large, say 3-inch or 4-inch, fire engine connection and from 1 to 3 standard 2½ inch hose connections. Except in the most sparsely settled districts the use of "one-way" hydrants is to be discouraged, while in congested districts, as already noted, from 2 to 4 connections should be provided. Except in residence districts, the supply pipes from the distribution system to hydrants should not be less than 6 inches in diameter and frequently 8 inch pipes become desirable, especially in connection with special high-pressure fire systems. Hydrants connected with distribution pipes less than 4 inches in diameter are practically valueless for fire protection even in unimportant residence districts. Hydrants should be constructed of great strength and durability and designed as simply as possible. When the main valve is opened, the waterway should be ample and unrestricted so that the loss of head by friction in both barrel and nozzle shall be reduced to the lowest possible amount. Recent tests *8 of hydrants sold by various makers have exhibited a striking lack of uniformity in this regard, certain types showing very high friction losses in either barrel or nozzle or both, while others were very satisfactory in these respects. It is apparent that these features have to do with the dependableness of fire protection offered by any given system of works. In cold climates careful attention must be paid to the design and setting of hydrants to secure thorough draining after use, thus avoiding the possibility of freezing and the consequent probability of being out of service in an emergency.

Valves.

Valves are employed in connection with distribution systems to allow of shutting off small districts to enable repairs to be made with a minimum of disturbance of the general system. They should therefore be placed wherever small branches lead from a large one, at all intersections of large pipes, and at intervals along the course of main pipes. This matter is espe-

cially important in earthquake regions since, by the plentiful use of valves, small districts in which accidents to the distribution system have occurred may be shut off quickly. Owing to their great cost in the aggregate, and individually for the larger sizes, there is a temptation to use as few valves as possible in constructing water works systems, and it frequently happens that water works are very inadequate and unsatisfactory from this point of view.

Indicating Apparatus, Measuring Devices, Telephones.

Water works systems should be provided with such indicating and measuring apparatus and such means of easy and rapid communication as will render them more dependable in times of emergency. It is especially desirable that telephone lines should bring all the important structures, including reservoirs, gate houses, pumping stations, offices, residences of water works officials, etc., into direct and easy communication with each other. Apparatus to indicate pressures in various parts of systems is frequently of great service. All reservoirs should be equipped with suitable gauges to indicate either by electrical connection or by visual arrangement the depth or volume of water available in storage. Devices for measuring the total amount of water furnished to the community and the amounts furnished to individual consumers are of immense importance in preventing waste, in locating breaks, etc., thereby rendering the entire system more dependable and better adapted to its purpose.

RECORDS AND MAPS.

Every well maintained system of water works should keep complete records relating to the various structural features and in detail to the history of construction and operation. All valves and hydrants should be listed and plainly shown upon suitable plans which should also show the exact location of all pipe lines and, so far as possible, of all other underground structures which may have affected the original location of these pipes or may influence the conduct of repairs in case of breaks or other emergencies. Such records should be had in duplicate for the benefit of both the water and fire departments. It is an unfortunate fact that in a large number of our cities today such records as have been referred to above are either altogether lacking or are too indefinite to be of real value. In some cases even

the sizes of pipes in many of the streets are unknown and it has been necessary for the fire and water departments to gather the needful information with respect to these features as best they might, usually by inspections and measurements during the process of repairs.

RELATION OF CERTAIN OTHER FEATURES OF MUNICIPAL ENGINEERING TO THE PROBLEM OF FIRE.

It is well known to everyone interested in the problem of fire fighting that the water supply is not the only item of municipal engineering concerned with the matter of fire protection and fire hazard. On this account it is believed that reference should be made to four important features which, if properly provided for, will, in connection with the public water supply, help to solve the problem of furnishing adequate fire extinguishment service. These features are as follows:

1st.—The suitable lay-out of streets in general, with particular reference, however, to the provision of numerous diagonal thoroughfares bringing all parts of the more or less congested districts into direct communication;

2d.—The frequent provision, at right angles with each other, of wide streets or boulevards which, due to their width, not only act as fire arresters, but due to the freedom from congestion, shall represent lines along which transportation conditions shall be safe and rapid;

3d.—The provision, especially on such wide streets and diagonal thoroughfares, of the most perfect surface conditions possible with a view to hasten transportation in general and to permit rapid progress of engines and other fire-fighting apparatus in moving toward fires, and thus to reduce the opportunity for such fires to get under way;

4th.—The removal from above the street surface, on all important streets, and in general throughout the municipality, of all overhead wires of all kinds whatsoever.

If the features above enumerated are provided in any municipality, not only will the fire hazard be reduced in a most important manner, for reasons which are very patent to any

one who has given the matter any attention, but the ease of transportation will be increased and the appearance of such a city will be developed in greater measure than is generally recognized to be possible. Furthermore, the writer believes that the cost of providing these features in large municipalities will be met many times over by the increased value of property, by the decreased rates of insurance, and by the reduction of the annual loss due to the destruction of property by fire.

In countries subject to earthquake disturbances too great attention can scarcely be paid to the matter of placing beneath the ground all electric and other wires which are now carried upon poles above the surface of the streets. It is apparent that severe earthquake shocks are likely to throw down large numbers of overhead wires and thus cut off communication between different districts at a time when easy communication is most important.

DEVELOPMENT OF SPECIAL HIGH PRESSURE WATER SUPPLY SYSTEMS FOR FIRE PROTECTION IN CERTAIN CITIES OF THE UNITED STATES.

During the past fifteen years considerable attention has been paid by municipal engineers, water works managers, and those interested in insurance problems, to the matter of providing for fire service, in the congested districts of the larger cities, systems of extra heavy pipes in which water can be forced under pressures very considerably greater than those which, for reasons which have been stated, can ordinarily be had in distribution systems supplying water for all purposes. From such special pipe systems larger streams through greater lengths of hose, or a greater number of streams through a specified length of hose may be obtained and may be concentrated upon particular districts of especial hazard, such districts being the ones which are naturally first served by such systems. These systems are therefore installed for the specific purpose of applying very large volumes of water to fires at the very outset, so that there may be no possibility of gaining much headway or of spreading over any considerable area. By such means the fire hazard is greatly reduced, and statistics have shown that in all cases where these plants have been introduced the investment has been most satisfactory from the standpoints of safety and of finance.

The first pipes placed in cities for this special purpose appear to have been those laid in the city of Cleveland in the year 1888. At about the same time, perhaps in the following year, similar pipes were laid in the city of Milwaukee, and from these initial undertakings, general interest has developed and several other systems have been installed, namely, in Detroit, Buffalo, Providence, Boston, Philadelphia, and New York. The problem is now being diligently considered with a view to introduction in several other cities and among these perhaps nowhere is the public interest and necessity more intense than in the city of San Francisco.

These special high pressure systems while filling a long-felt need seem to have first been the immediate outcome of a desire to enlarge the field of usefulness of fire boats, which for many years have been used along the water fronts of several of our American cities. Such boats fulfilled a most important service, but were formerly restricted to the protection of property within the territory immediately adjacent to the water fronts, since it was usually impossible to employ lines of hose of greater length than from 500 to 1000 feet and obtain suitable fire streams with reasonable pressures at the pumps on the boats. Fire boats are very expensive to construct and maintain, and it was naturally desired both from the standpoints of the reduced fire hazard and the reduced cost of operation per unit value of property served that by some means or other their field of operation should be extended. In the cities of Cleveland, Milwaukee, Detroit, Buffalo and Boston the high-pressure pipe systems are served from fire boats only, connections being made at one or several points according to the local conditions. In Philadelphia, on the other hand, there has been installed a more complete system of pipes than exists in any of the other cities mentioned, and here provision has been made for the forcing of water into the pipes by pumps located in a central power station, but connections at certain wharves, where the fire boats can be attached, have been provided for emergencies. It is believed, however, that the further use of fire boats is no longer contemplated, and that the central station will prove adequate for all present needs. A central power station is also proposed for the extended system in Boston, and for the Van Ness Avenue fire district in San Francisco. In Providence the conditions are such that during fires a connection may be made between a high pressure gravity supply and the special system of fire service pipes laid in the streets of districts of great haz-

ard. Narrow cities with long water fronts, such as New York (especially the Borough of Manhattan, Philadelphia), and to a less extent San Francisco and certain other of the cities mentioned, are particularly adapted to the double use of fire boats for inland and water front protection. Nevertheless, where extensive systems of pipes are installed, economy and safety seem to dictate that central pumping stations are superior.

With the exception of the cities of Boston and New York, all of the cities mentioned employ fresh water in their special fire service systems. In these two cities salt water is much more readily available than supplies of fresh water. At Boston preliminary investigations were made to determine the probable effect of salt water upon the various structures of the proposed system and its suitability for fire extinguishment. As a result of this investigation, and later as the result of experience, salt water may be said to be very suitable for the service desired. In order to prevent corrosion due to galvanic action it is needful to insulate from each other all metals of different electrical potential. In the Boston system the hydrants are emptied after use, but the main pipe lines are constantly kept full of water. The valves of the Boston system are of solid composition, fitted with flanged ends insulated from the adjoining pipes by heavy washers or gaskets of pure rubber.

Very heavy cast iron pipes appear to have been used in the construction of most of the systems which have been introduced thus far, the thickness of such pipes depending upon the maximum working pressure plus the maximum pressure due to shocks from water-hammer. Either flanged joints or extra-deep bell and spigot joints may be employed with satisfaction. If flanged joints are used, as in Philadelphia, specially designed expansion joints are also required to avoid undue strains upon pipes and fittings.

The pressures employed at the supply pumps of the several systems seem to range from about 175 to nearly 300 lbs. per square inch, while the hydrant pressures and those at the nozzles depend, of course, upon the distance from the pumps, the length and size of fire hose, the size of nozzles, the number of streams, etc. The quantity of water which may be discharged by a single stream from such systems is relatively very large and in certain tests at Boston have ranged from about 400 to 1500 gallons per minute. More usual streams would perhaps be represented by from 500 to 800 gallons per minute. It will be seen that in comparison with the ordinary 250 gallon stream, those

from the larger hose and nozzles under the higher pressure of special fire service systems are always very much greater and more effective, and are of particular value in cases of large fires which have had opportunity to gain considerable headway. The hydrants employed in connection with these systems are never provided with less than 2, and they frequently have 3 or 4 hose connections 3 inches to 4 inches in diameter. In Philadelphia, which perhaps represents the latest and most comprehensive practice, hose of 3½ inches in diameter is employed and nozzles of from 1¼ inches to 2½ inches in diameter are used.

It does not appear that many figures are available with respect to the reduced hazard and to the saving of property resulting from the use of these systems, but in all cases, as already suggested, this saving has been very considerable and the investment has been deemed most satisfactory. These facts are clearly indicated in the following table in which is given the information with respect to the total insurance and the total loss by fire in the city of Philadelphia for the year 1903, prior to the installation of the special high pressure system and for 1904 when this was in operation, other conditions apparently remaining as before.

TABLE NO. 10.

Insurance Statistics*9 Relating to Decreased Fire Hazard in Philadelphia, Pennsylvania, to be Partly Accounted for by the Introduction of a Special High Pressure Water System.

Insurance.	1904.	Year.	1903*.
Total in force	\$45,832,225.00		\$41,924,825.00
Total loss	1,640,198.00		2,326,528.00
Total loss (per cent).....	3.58		5.54

Reduction in loss during 1904 from that of 1903, \$686,330.

Percentage relation of this saving to total loss in 1904, 29.5.

*The High Pressure Fire Service was ready for operation in December, 1903.

Regarding the fire department work, Mayor Weaver of Philadelphia in his annual message in 1905 says: "Philadelphia may well be proud of this branch of the municipal government. Its increased efficiency is shown by the fact that although there were 3605 alarms of fire during 1904—254 alarms more than there were in 1905—the loss by fire was \$686,330 less in 1904 than in 1903. The Bureau has been greatly aided in its work by the high pressure fire service."

A BRIEF REVIEW OF THE EFFECT OF EARTHQUAKE UPON WATER WORKS STRUCTURES IN THE RECENT CENTRAL CALIFORNIAN DISASTER AND THE LESSON TAUGHT THEREBY WITH REFERENCE TO DESIGN AND CONSTRUCTION.

The great earthquake of April 18th, 1906, was more or less immediately responsible for the most widespread and disastrous fire known to modern times. If the earthquake could have occurred without causing fires to break out in the city of San Francisco, it is probable that the loss of property would have been comparatively small. If the earthquake had occurred and had not temporarily cut off almost the entire water supply of the city and crippled the distribution system at many points, even though fires broke out in all parts of the city, it is hardly possible to believe that the destruction would have been anywhere nearly so great as under the circumstances which actually prevailed. In view, then, of this most unexpected result, and of the series of accidents which befell the water works system, it is deemed of sufficient importance at this time to devote a portion of this paper to a discussion of the general effects of earthquake disturbances upon water works structures and the problems of design, construction and maintenance. If future earthquakes, which might be attended with equally fearful results, are to be safely met, the problems brought into view by the recent disaster must be properly solved.

It was the privilege of the writer, through the courtesy of Mr. Hermann Schussler, Chief Engineer of the Spring Valley Water Company, to make a more or less complete examination, in the early days following the earthquake, of the condition of the various water works structures built to supply San Francisco with water, particularly those located on or near the lines of maximum earthquake disturbance. The writer, as a member of a committee of the San Francisco Association of Members of the American Society of Civil Engineers appointed to make a study of the effect of earthquake upon water works structures, was fortunate in having a further opportunity to become acquainted with the leading facts relating to the earthquake effects on structures within the entire region about San Francisco Bay.

In a broad, general way, the effects of the earthquake upon water works structures may be placed in three classes as follows:

- (a) Those produced along the fault line due to direct, disrupting, shearing, and vibratory forces of great magnitude.
- (b) Those produced elsewhere due to vibration with con-

sequent disruption, and particularly felt by aerial structures such as elevated tanks and pipe lines supported by towers, trestles, etc.

(c) Those produced by oscillation of the ground at points where, due to lack of homogeneity, the materials were caused to settle unequally, thereby rupturing structures located in the ground at such points.

(a) Several dams of the Spring Valley Water Company happened to be located either upon or immediately adjacent to the line of the fault which, on the San Francisco peninsula, extended in a generally southeasterly direction from the coast line just south of Lake Merced for a long distance southward through valleys occupied by the San Andreas and Crystal Springs reservoirs. In particular, the high earthen dam of the San Andreas reservoir was exposed to the terrific shearing forces which exhibited themselves in the production of a clear-cut fault extending in an almost straight line for many miles in this vicinity. Not only was the dam intact after the earthquake, but so far as the writer could discover not one drop of water leaked through it during or subsequent to the shock. None of the other dams in this region were very seriously injured, although all were exposed to severe shocks. The facts show that if design and construction are properly carried out, these important features of water works systems are entirely satisfactory even under extraordinary conditions.

Pipe lines located along the line of fault were naturally unable to withstand the tremendous rupturing forces there operating. Unfortunately the Pilarcitos pipe line, supplying a part of the high-service district of San Francisco, was located for about $3\frac{1}{2}$ miles along the line of fault and throughout this distance was entirely destroyed, as would be expected. Now that a knowledge has been gained of the location of this fault line, which appears to represent a plane of weakness in the earth's crust, it will be possible to avoid this stretch in the placing of future pipe lines. The destruction of the Pilarcitos pipe line was not due to any inherent weakness in the pipe, and throughout its length it was found to be in an almost perfect state of preservation, so far as the quality of metal, the design of the joints, and the character of construction were concerned. So far as the writer knows there were no other pipe lines located along the line of this main fault and there are therefore few, if any, other examples of similar destruction.

(b) The effects produced by vibration alone appear to have been felt for the most part by pipe lines on trestles, especially those

crossing marshy, soft lands, and by elevated tanks supported by towers. Due to the vibrations of the supporting trestles, the other two main pipe lines supplying San Francisco with water, namely, the Crystal Springs and Alameda Creek pipe and the San Andreas pipe line received serious injury. These failures have been fully described in current engineering literature. *10 Many water tanks failed, due either to the shearing of rivets in supports which had not been properly designed, or due to the movement of the tanks on elevated platforms to which they had not been anchored.

The problem of supporting pipes on trestles in such manner that they will not receive injury during long continued and excessive vibrations due to great earthquake is, perhaps, one of the most difficult to solve of all the problems brought into special prominence by the recent disturbance, and it would appear that real safety can only be assured by locating all important pipe lines throughout on solid ground, in which the vibration shall be a minimum and in which unequal settlement will probably not occur. If this can not be done, and it perhaps can not in all cases, it would appear that pile supports, carefully tied together, to which the pipe may be suitably anchored, should be provided; and along the pipe lines so located spherical and slip joints, allowing of some lateral and transverse movement should be arranged for at frequent intervals. With such method of construction it would appear that injury, if caused at all, would be local and so confined that repairs could be rapidly effected.

With respect to stand pipes and other similar structures, experience has indicated very plainly that with properly braced supports and suitable anchorages, both between the supports and the ground and between the tanks and their supports, little damage need be anticipated.

It is an interesting fact of much significance that none of the pumping apparatus of the Spring Valley Company was injured in the slightest degree notwithstanding that certain pumping stations were located within the region of very great disturbance. Their satisfactory behavior is undoubtedly due to their careful design and the provision of extremely heavy and adequate foundations.

(c) A very considerable amount of damage, not only to water works structures but to all structures generally, was caused by unequal settlement. From his source practically all of the immediate injury sustained by the main pipes in the distribution system in San Francisco was received. Two of the most notable instances

of failure were the large pipe lines (22 inches and 16 inches in diameter) located on Valencia street, between Eighteenth and Nineteenth streets, where an unusual amount of settlement (5 feet, maximum) and a considerable transverse movement, (6 feet, maximum) occurred, due to the oscillating of soft fill over an originally marshy depression. Here, as at all other points where similar effects were produced, all structures beneath the surface of the street were entirely destroyed, including water and gas pipes, telephone conduits, sewers, cable ways, etc. The experience gained by these unfortunate occurrences should be of greatest value in determining suitable routes for future important pipes, etc. The writer knows of no more valuable information along this line than that given by Mr. Hermann Schussler *11 in a map recently prepared to show the positions of breaks in distribution pipes throughout the city of San Francisco.

Looking to the future it appears that reasonable security can only be obtained; first, by locating all main pipes whenever possible in uniformly hard ground; second, by providing suitable cross connections between all important districts; third, by placing valves on all important mains and cross connections so that any one or several districts may be quickly cut off from the remainder of the system. Whenever passage must be made from hard to soft materials, or vice versa, it would appear that especially designed structures must be arranged. There is evidently a considerable latitude for varying solutions of this problem. One feasible scheme would perhaps be the construction of tunnels in which the pipes would be supported in such manner as to admit of considerable movement on the part of the tunnel without greatly disturbing the alignment of the pipes. In addition, if spherical and expansion joints were provided in such locations to permit of transverse and longitudinal motion on the part of the pipe, it would appear that practical safety could be had. Of course such structures are very expensive, and since they require a relatively large amount of space they would be very difficult to install beneath our streets where already great congestion of pipes and conduits of various kinds obtains.

A serious difficulty apparently inherent in the ordinary distribution system was brought out prominently by the recent San Francisco disaster. It is the widespread destruction of service pipes which is likely to occur both as the result of the earthquake and consequent upon the destruction of buildings by earthquake and fire. Through these broken services such quantities of water may be lost as to seriously affect the delivery of

the mains even if these should remain intact. The most feasible remedy seems to be either the laying of main pipes to connect only with auxiliary distribution pipes from which the services can be taken; or the provision of an entirely independent high pressure fire system into which, of course, no taps would enter.

In conclusion it may be said that the effects of the earthquake have brought most prominently into view, as already suggested, several important defects in current practice. But it may be said with considerable assurance that no problems have been introduced which are not capable of reasonably satisfactory solution, provided the requirements for earthquake conditions are consistently and constantly held in mind by engineers and others interested in these affairs. Simplicity and compactness would appear to be desirable characteristics and if combined with stable and suitable design, we may expect that future seismic disturbances will produce far less significant results than those caused by the earthquake of April 18, 1906. It must not be expected that structures designed to successfully meet these difficult conditions can be built at a cost not greater than that required for similar undertakings in regions where earthquakes do not occur.

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Mr. G. D. Dornin—Mr. President, I believe that we have all enjoyed to the limit Professor Hyde's most excellent paper. I believe it is full of matter that should be utilized in our councils, the councils of the Underwriters. I would therefore move, not only a vote of thanks to Professor Hyde, but that the Executive Committee be instructed to print in pamphlet form a sufficient number of copies of the paper to supply the demand which I believe will follow, to be delivered to those of the community who desire them, and that we pay whatever may be required to cover the cost of printing. We are all awake to the necessities of an effective water supply, and effective water protection, not only in San Francisco in the near future, but elsewhere in the country. So I make the two motions, first, that the thanks of the Association be tendered to Professor Hyde for his excellent paper, and second, that the Executive Committee be requested to have printed a sufficient number of copies thereof, to be issued in pamphlet form, for the use of the members and such as may desire them.

The Secretary—I second the motion, Mr. President, but I would like to suggest to Mr. Dornin that he add to the second motion a proviso that the price sufficient to cover the cost be placed upon the pamphlets so issued.

Mr. Dornin—I will embody that in the motion, and the Executive Committee can look after that matter.

The motions were put by the President, and unanimously carried.

The President—I am happy to extend to Professor Hyde the hearty thanks of the Association, in accordance with the motion just passed.

It is now 12 o'clock, and a recess will be in order. Upon assembling this afternoon, we shall first listen to a paper by Mr. Robertson upon "Effect of Fire on Class 'A' Buildings," and in connection with the paper Mr. Robertson will show us some stereopticon slides. As the room must be darkened for the purpose, I trust that you will be on hand promptly at the hour named.

A recess will now be taken until 2 o'clock.



AFTERNOON SESSION.

The President—The meeting will please come to order. Before proceeding with the regular program, I desire to announce the appointment of the Committee on the report of the Executive Committee and on the President's address. I will name as such Committee, Mr. J. L. Fuller, Mr. Herbert Folger and Mr. John W. Gunn.

We will now proceed with the papers upon the program. We will first listen to a paper on "Effect of Fire on Class 'A' Buildings," by Mr. George M. Robertson, and postpone until after the reading of that paper Mr. Gilliland's paper on "The Present Fire Hazard in San Francisco."

I have the pleasure of introducing to you Mr. George M. Robertson.

EFFECT OF FIRE UPON CLASS A BUILDINGS.

Geo. M. Robertson.

In view of the numerous excellent reports covering this subject in great detail, all of which are now or will shortly be accessible to the members of this Association, and should be carefully studied by them, I shall not attempt at this time to do more than make a sketch or outline and give a general idea of the matter, particularly with reference to the side that touches the insurance fraternity: "the indemnity paid by reason of the effect of fire upon these buildings." In fact the question might be answered and the matter dismissed with the statement made to me by a contractor and builder of large experience in this city. When I asked him what was, from his viewpoint, the effect of our fire upon the buildings considered, he answered tersely: "They were all gutted." While this is substantially true as regards the greater number of these structures, there are several, chief of which is the Kohl Building, of which that would not be entirely true.

However, in the main, this statement is true. They were all gutted; that is, they were all so damaged that it has been found necessary to tear out and renew practically all of the

partitions, many of the floor arches, and all of the ornamental work and interior trim. Ornamental stone work, carvings and architectural embellishments generally were spalled and defaced to such an extent that, no longer serving their purpose, it is necessary to remove them. This includes window facings, columns and cornices; the evidences are on every hand.

Tile partitions were cracked and dislocated to such an extent that while it might have been possible in many cases to repair them in place, and while in some instances this has been done, still, to be sure of the work and particularly of its appearance, it was necessary to remove them entirely and build anew.

Concrete and plaster partitions fared no better. In fact, as far as their appearance was concerned they fared a great deal worse, because in the case of tile partitions the alignment was generally good after the fire, while most concrete and plaster partitions were warped and twisted out of shape even where they were in place. This statement is not made with the intention of drawing a comparison between these two materials and all partisanship in this matter is disclaimed; both are excellent, and the loss of either would be a severe blow to the art of fire protection.

Floors were more fortunate than partitions and concrete floor arches protected by a suspended ceiling beneath them, taking the brunt of the flame, have been very generally left in place after having been tested very carefully to see whether they were in condition to resist those stresses likely to be imposed upon them.

It is not altogether clear to me, however, that the tests imposed, no matter how severe they may be apparently, are exhaustive. The mere fact that a square foot of concrete floor sustains under test a certain number of pounds weight for a few hours, is not conclusive as to its ability to sustain that stress indefinitely; still less is it conclusive as to its capacity to resist fire again as successfully as it did at first.

Concrete is really not a solid in the sense that steel is solid; even after a considerable space of time it is susceptible of deformation under stress, and as it undoubtedly loses much of what elasticity it may had originally when subjected to high temperatures for any length of time, it is questionable to my mind whether the deformation under stress which was successfully withstood by unburned concrete, would be as successfully resisted by the same concrete which has been heated as the

floors were heated during our great fire. I have here two samples of concrete from floors which have not been removed, and I think that a very cursory inspection will satisfy you that they are not as good material as they were before the fire.

Tile floors suffered a good deal and with one or two exceptions have been, or should be, removed. I do not think, however, that the evidence is final as to them, and it is quite possible that with the protection to be derived from a ceiling beneath the floor, they may prove to be excellent material for this use. It seems difficult to find tiles of just the right consistency for structural use: if they are burned at a high temperature they are likely to be brittle and break easily under sudden shocks or jars, while resisting a much greater stress if it imposed gradually; the distribution of the material or shape of the web, and their relative sizes also have a great influence on the resistance of the tile; they resist fire well unless they have been burned at too high a temperature.

Failures of partitions were not traceable alone to any inherent unfitness of the material of which they were built. The manner of their construction was in many cases at fault also. In those instances where the partition began at the fire resistive floor itself and continued without break of any kind to the lower surface of the fire resistive floor above, that is to say, where they rested either upon concrete or steel and went up to concrete or steel, they behaved very well, as far as confining the fire was concerned, and it seems likely that partitions constructed in that manner would confine a fire to the area in which it originated, if the openings were properly safeguarded. It must be borne in mind that some provision should be made to allow for expansion in partitions constructed in this way; if the space between rigid frames is entirely filled, expansion would cause serious disturbance and probable failure.

In those cases, however, where partitions depended for stability upon wooden sills to which were nailed or screwed wood studs, failure was invited. Add to this the wooden supports for doors and frames for transoms and hall lights and failure became inevitable.

It is difficult to make a comparison between different materials of construction, tile, concrete, cast iron, and steel, because the conditions varied in different buildings. In the James Flood Building, for example, where the floors and partitions were of tile and seemed to stand well, the temperature

was not high generally, as parts of unburned wood still remained in places, as for instance, wood floor covering and wood sleepers for nailing wood floor covering, wooden sash frames and wooden casings, wooden closets and cupboards. In this building also marble stair treads and marble slabs in the wainscoting were in very good shape for the most part. In fact while conditions varied in some degree, it can be said safely that the fire which destroyed most of the large buildings was not a very hot fire, it might be described rather as a lazy fire, proceeding slowly and deliberately. Nevertheless the damage was, from an insurance standpoint, very extensive and in the St. Francis Hotel the cost of restoring the terra cotta partitions is as much or more than the original cost.

Floor coverings, wood nailed to wooden sleepers imbedded in concrete, were of course all destroyed or so damaged as to require entire removal. All wooden trim, such as door and window casings, base boards around walls and closets, were generally destroyed and by the heat generated during their destruction aided in destroying partitions and softening the iron work. Even wooden trim covered with metal did not escape although it had a retardent effect, and in cases where there was not a rapid sweep of flame, delayed the fire and gave it time to waste itself without doing great damage. This effect was noticeable in the Kohl Building; the retardent effect in this building was assisted, however, by the fact that the building was not encumbered with wooden floors and was, moreover, not exposed by any very hot fires. Even under these favorable circumstances the damage to the Kohl Building was nearly fifteen per cent. of the sound value of the building; \$95,469.46 out of \$650,000, with an insurance of \$75,000, this being a total loss as far as the insurance companies were concerned.

Granite columns and facing, and in fact all ornamental stone work was spalled and cracked in such a manner as to necessitate its removal wherever it was exposed to temperatures at all elevated. The granite columns of the Hibernia Bank, which suffered from the heat of buildings across the street, being examples of this destruction. The beautiful stone work on the exterior of the James Flood Building also suffered greatly.

In most instances this destruction was principally due to heat of fire within the building and escape of hot gases by the openings; this is noticeable in the damage done to soffits of window arches and doors and to cornices above window openings.

It goes without saying that all interior finish of light mate-

rial other than wood was destroyed, as well as wood itself. This refers to ornamental grills around elevators, handrails and other adjuncts of stairways and things of that description. Mosaic and other ornamental floors suffered entire destruction as a rule, and the same thing may be said of marble work, such as wainscoting, stair treads and floors. Glass in windows and doors was also destroyed, and in fact by its destruction usually left the way open for the flames to enter. This feature deserves the closest consideration and if some means can be found for overcoming it, a long step in advance will be made toward making a fire resistive building. We have practically reached the point where a fire may be confined to the area in which it originates and it now remains only to exclude it when originating outside.

At this point we encounter the main difference between that which is and that which ought to be. Two buildings which are still standing offer instructive testimony in this matter. The Western Electric Company's building on Folsom street—mill construction with wired glass windows on one side—owes its salvation to that fact, as the possession of this protection enabled a handful of men to extinguish small fires as fast as they began, and in that way to prevent a general burning; this, too, in face of the fact that the radiant heat passing through these sashes blistered paint and woodwork from ten to twelve feet beyond it. The other building, one on Bush street, built for and occupied by the Pacific Telegraph & Telephone Co., is of steel frame, brick and stone exterior walls and concrete floor arches, was filled with combustible matter in the shape of packing cases and material accompanying electrical machinery which was being installed. It was gutted, as were the others, but the rolling steel shutters which fitted the windows in front undoubtedly saved the front to a great extent from the spalling and calcining which would have occurred if the flames had had free scope. The fire was communicated to this building through one or two unprotected openings in the rear, and this fact points to the desirability of securing all openings. In fact, no one thing stood out with greater distinctness among the lessons of the fire than this: that all openings must be protected, both to prevent a fire from entering a building, and to keep it confined in a building if it starts there. The question of openings is of as much importance in the scheme of fireproofing as that of column protection.

Columns, sustaining as they do the girders which bear the

weight of the floors and the loads they carry, are of the utmost importance, for failure of a column means perhaps the destruction of all the building immediately above it. This is always the case if such failure occurs in a basement or cellar, and generally speaking, the nearer to the bottom of a building the failure occurs the greater the havoc wrought by it. Several notable cases of this kind occurred in this city. The Kamm Building on Market street had a large stock of wall paper in the basement; this material made an exceedingly hot fire which softened the steel columns in the basement to such an extent that they failed completely, doubling upon themselves and allowing the entire frame above them to sink and be warped out of shape. It has been necessary to remove all of this part of the building and the wrecking operations, which would have been unnecessary if the subsiding had not occurred, have taken up much valuable time, besides costing a large amount of money.

Cast iron columns with light plaster protection had the same fate in the basement of the Sloane Building. A stock of linoleum and carpet lining stored in that portion of the building created as hot a fire probably as the wall paper in the Kamm Building, and the columns suffered in the same way, subsiding upon themselves and allowing the girders and floors above to come down. This took place in the interior portion of this structure, and I do not know yet to what extent it will be necessary to tear down and renew; the difference between the behavior of these cast iron columns and that of the steel columns already spoken of is interesting, and as these in the Sloane Building are still there, it is well worth a visit to inspect them. The cast iron columns mushroomed, that is, they sank down by the enlarging and softening of that part of the columns exposed to the greatest heat. The steel columns softened also but twisted into snake-like shapes. The result, however, was the same; the part of the building immediately above them came down.

A column in the basement of the Mills Building immediately in the wake of a large accumulation of papers of various kinds—accounts, records, etc., also softened and added to the damage already suffered by that building.

A large number of columns were softened by the heat in the Fairmont Hotel and failed, causing a damage due to this cause alone of probably not less than half a million dollars. The necessary protection which would have prevented this loss

would in all probability not have cost more than \$40,000 at most. These columns offer a fair example of the different ways in which columns of different types yield to heat. Those made of Z bars or channels assembled in compact shape sink down in the direction of their axes without much horizontal displacement. Those built of angles with latticed sides fail horizontally as well as vertically; they buckle instead of merely subsiding and in that way allow more play and consequently more damage to occur to the floors above.

In general it may be said that properly protected columns did not fail during our fire, unless exposed to very exceptional temperatures, and columns of this type should certainly receive attention and have an effect on the rate of the building in which they are placed.

The question of openings is yet in abeyance. The spread of fire and the general destruction wrought by it was due, without question, to the absence of protection for these parts of the building, and that is our next most serious problem.

Steel frames stood the fire well where the protection was adequate and may be considered satisfactory for this class of construction. Statements of sound values and of cost of repairing three fireproof buildings are here appended.

GRANT BUILDING, SEVENTH AND MARKET STREET.

Cost of Building.		Cost of Repairing.	
Grading	\$ 2,500.00	Removing debris..\$	3,000.00
Concrete work, floors and sidewalks ...	7,195.92		1,000.00
Cast iron	2,707.75		
Structural steel.....	66,773.25		3,000.00
Brick work.....	30,058.85		8,000.00
Terra cotta.....	15,500.00		500.00
Granite work	3,559.75		600.00
Elevators	17,980.00		6,000.00
Plumbing	17,132.06		16,000.00
Heating	7,382.21		7,000.00
Fireproof partitions.	12,378.67		12,000.00
Lumber	3,614.37		4,000.00
Millwork	22,200.51		24,442.00
Labor	19,724.84		21,696.00
Glass and glazing...	6,078.33		6,677.00
Elevator enclosures.	3,837.25		2,000.00
Bulletin boards and kick plates	380.00		380.00
Gas fixtures.....	1,956.00		1,956.00
Iron stairs.....	7,600.75		4,000.00
Electric wiring.....	5,048.85		5,000.00
Painting	7,266.25		7,266.00

Plastering	8,245.67	10,000.00
Roofing and sky-lights	1,306.35	1,306.00
Sidewalk lights.....	2,315.36	900.00
Marble work.....	14,065.09	14,000.00
Mosaic work.....	3,809.65	4,500.00
Mail chute.....	900.00	900.00
Hauling	442.67	300.00
Window shades.....	465.00	465.00
Boiler and tanks....	3,777.31	300.00
Oil burning plant...	810.65	300.00
	<hr/>	<hr/>
	\$297,043.36	\$173,788.00

SHREVE BUILDING, POST AND GRANT AVENUE.

	Sound value of Building.	Loss and Damage.
Grading ..	\$ 2,100.00	
Wrecking and cleaning up.....		5,000.00
Concrete work and floors.....	13,508.00	1,900.00
Structural steel	77,194.16	
Erecting steel	13,509.00	
Other iron work.....	2,109.41	4,500.00
Granite work	6,110.00	3,919.00
Sandstone work	54,308.00	50,825.00
Brick work	27,583.09	11,000.00
Fireproof floors, partitions and ceilings ..	29,577.40	15,855.00
Plumbing ..	34,284.33	29,000.00
Heating ..	6,640.80	6,000.00
Elevators ..	27,733.00	8,700.00
Bronze work, grill and stair.....	30,959.00	21,959.00
Sidewalk lights	2,104.00	1,850.00
Marble work	14,690.17	14,000.00
Terra cotta partitions.....	9,819.48	9,000.00
Electric wiring	14,988.15	13,000.00
Copper cornice	3,348.00	3,000.00
Mill work	31,876.92	31,876.92
Plastering ..	14,737.75	14,737.75
Cast iron bases.....	3,000.00	
Machinery ..	8,020.75	2,000.00
Linoleum ..	6,565.00	6,565.00
Glass and glazing.....	9,251.00	9,251.00
Terazze tile and Mosaic.....	9,000.00	9,000.00
Mail chute	1,150.00	1,100.00
Painting and varnishing.....	12,609.00	12,609.00
Gas fixtures	3,000.00	3,000.00
Scagliola work	2,141.00	2,141.00
Hardwood floors	2,407.00	2,407.00
Roofing and skylights.....	2,075.00	2,075.00
Awnings ..	225.00	225.00
Ventilators, hose reels and shades...	1,628.43	1,628.43
Carpenter labor	20,908.00	20,908.00
	<hr/>	<hr/>
	\$498,711.65	\$319,032.10

HOTEL ST. FRANCIS.

Cost of Building.		Cost of Repairing.	
Grading	\$ 5,592.00	Cleaning debris. \$	12,000.00
Concrete work....	30,238.95		10,000.00
Granite work....	25,027.18		9,500.00
Sandstone work...	132,321.18		60,000.00
Cast iron work....	5,553.86		
Structural steel...	174,656.42		20,000.00
Brick work.....	67,717.56		20,000.00
Terra cotta and partitions	74,837.00		75,000.00
Fireproof floors and suspended ceil- ings	63,647.64		30,000.00
Concrete hall finish	2,729.79		3,000.00
Chimney pipe....	450.75		450.00
Marble work.....	65,115.32		80,000.00
Mosaic work.....	387.16		487.00
Scagliola	10,775.00		10,775.00
Bath room, kitchen and elevator til- ing	41,757.69		41,757.00
Plumbing	144,182.43		140,000.00
Heating	22,008.85		20,000.00
Wiring	54,605.77		50,000.00
Copper cornice....	9,823.00		9,823.00
Skylights and ven- tilating pipes....	7,262.67		7,262.00
Elevators	53,160.00		20,000.00
Elevator cages....	1,565.00		1,565.00
Grill and metal work	59,546.96		50,000.00
Plastering	49,806.25		60,000.00
Painting, papering, labor and tinting	38,188.90		38,188.00
Electric fixtures...	33,335.63		33,000.00
Mail chute.....	1,995.00		1,995.00
Sidewalk lights....	2,900.00		1,500.00
Revolving doors...	361.62		361.00
Carpenter labor...	60,330.94		70,000.00
Hardware	20,562.90		20,000.00
Hardwood for floors	1,523.04		1,523.00
Millwork	95,404.97		110,000.00
Lumber	11,503.27		13,000.00
Glass	19,354.60		19,354.00
Roofing	2,612.00		2,612.00
Safe	1,629.00		1,629.00
Filter	3,864.00		500.00
Cold storage.....	9,095.49		9,095.00
Exhaust and venti- lating system....	8,122.70		8,000.00
Hose reels.....	719.00		719.00
Machinery, boilers, and pining.....	19,313.80		5,000.00

Furnishing kitchen	11,397.80	11,397.00
Flag poles.....	140.00	140.00
Sidewalk doors....	351.95	100.00
Canopy over ladies entrance	107.80	107.00
Sundries	2,375.80	100.00
	\$1,448,362.34	\$1,080,339.00

A number of lantern slides loaned by Mr. C. Derleth, of the College of Civil Engineering of the University of California, were then exhibited, showing typical effects of fire upon columns, partitions, etc., as described by Mr. Robertson.

The President—We are certainly indebted, gentlemen, to Mr. Robertson for a very entertaining paper. He has covered a great deal of ground, and the illustrations that he has been good enough to provide have proven very instructive. Are there any remarks to be offered on the subject of the paper?

Mr. Gibbons—I would like to ask Mr. Robertson about the use of cast-iron columns filled with concrete, and whether they are as good as columns with a protection outside.

Mr. Robertson—No, I don't think they are. I don't think that anything on the inside of the column will protect the outside of the column. It may prevent the column from bending quite as rapidly, but it has no other effect that I know of.

Mr. Gibbons—I have understood that in a hotel fire in Victoria there were quite a number of cast-iron columns in the building, and with one or two exceptions those cast-iron columns fell.

Mr. Robertson—I presume it was a very hot fire.

Mr. Gibbons—Upon an investigation it was found that the ones that did not fall were filled with concrete.

Mr. Robertson—Of course, the concrete will assist, and if the fire does not get hot enough, concrete-filled columns will not bend. The concrete itself will form a very good column.

Mr. Gibbons—That was what I had in mind.

Mr. Robertson—While that is true in a minor sense, the outside protection is very much better than inside protection, and in case of a very hot fire, for which we must of course prepare,

the outside protection is absolutely essential.

The President—Are there any other questions or remarks upon the subject?

Mr. Heuer—I would like to ask Mr. Robertson what the process is in the creation of the so-called expanded metal. Do they expand it first, and then give it its twisted shape, so that it will retain its length after it is expanded, and will not shrink, or what is the process? I have a very faint idea about it, but I am afraid not a correct one, and I would like to be informed upon the point.

Mr. Robertson—The term “expanded metal” is really a misnomer. They take the strip of metal, and they turn it up on edge somewhat in that manner (showing) and make it cover a larger surface than it did before, and so it is really expanded in that respect, that is, it occupies more space because it covers the same surface, and it is turned edgewise like woven material. I think the term “expanded metal” is really a misnomer, as I say, although it is really expanded in the process I have just stated.

The President—If there are no further remarks upon the subject, we will now listen to Mr. Gilliland’s paper, “The Present Fire Hazard of San Francisco.” Gentlemen, Mr. Gilliland.

THE PRESENT UNDERWRITING CONDITIONS IN SAN FRANCISCO.

Adam Gilliland.

In considering the fire underwriting conditions in San Francisco as they exist today, we are dealing with temporary, transitional conditions, which require, not so much the enunciation of new principles in underwriting, as the studious observance of existing conditions, and the application thereto of principles which have already become axioms. We are dealing with conditions, not theories, nevertheless some theories held before the conflagration will be revised, some discarded, but emphasis placed on those which were demonstrated correct.

Though not discussing the future of San Francisco and the necessary protective devices which should correspond with its growth, it may not be amiss to state here that wide avenues are

very efficient fire barriers, for owing to the truth of this contention alone, we have a subject for our paper. .

It is needless to say that every company doing business in San Francisco prior to April last, had given the subject of conflagration hazard most serious consideration, but carefully evolved theories based upon local as well as general experience were overturned. The magnitude of the April fire, both in extent of area involved and in value of property destroyed, was far beyond what the most conservative underwriters considered a possibility. The combination of circumstances which originated and sustained the conflagration was beyond our most lurid dream, and nothing in the previous history of fire insurance furnished any experience upon which to predicate such a result.

However, the insurance companies, upon whom fell such an enormous portion of the burden arising from our recent experience, cannot ignore the possibility of the recurrence of a similar calamity, and this generation of underwriters will never write San Francisco business without having this in mind. The infrequency of earthquakes severe enough to inflict injury to underwriting interests, together with our absolute inability to forecast or prevent their occurrence, prohibit us from formulating any charge for this hazard which we can defend as approximately correct. Without sufficient data upon which to base a charge for this real, and for all we know, imminent hazard, it does not appear unreasonable for companies in their contracts to clearly and equivocally deny liability for fires caused by earthquakes. The municipality should devise and adopt the protective measures which will minimize the results of these convulsions, and the public should look for physical and material protection instead of insurance indemnity.

At the present time the business in San Francisco, considered from the standpoint of individual risks, is undoubtedly as good, meaning profitable, as before the conflagration. Rates have doubled and trebled, and from the hitherto favorable experience in this city, it would seem as if there was ample margin to cover all contingencies, barring general conflagration. Risks, which cannot possibly be considered liable to destruction in a general fire, are paying rates in excess of those charged in localities lacking all fire extinguishing facilities. In this connection I can see no reason why term business on our books, considerable of which has one or two years yet to run, and the hazard of which has been increased by vast changes in the districts where located, should not be cancelled and re-written at present

rates. Taking this action involves no injustice to the assured, but gives the companies that to which they are fairly entitled. Where so many records, as well as policies are destroyed, it will prove advantageous to have new contracts issued.

The fire department has been practically restored to its old efficiency, although the chief has recommended the insertion of an item in the proposed bond issue of \$654,000.00 for the erection of permanent buildings and necessary equipment to conform to the requirements of the rehabilitated city. There are now in service thirty-four engine companies, nine truck and eight chemical companies, and two Monitor Batteries, with 414 men doing fire duty.

Since the fire 20,000 feet of two and three-fourths inch hose and 10,000 feet of one and one-half inch hose have been purchased.

A duplicate alarm system has been installed in apparatus houses to insure against failure. The discipline of the department is good and its efficiency is undoubted.

A weakness in equipment may be developed under certain circumstances. For instance, if a third alarm should be sent in from the lumber and manufacturing district along the channel, the closing-in process might seriously deplete the protection necessary to the western portion of the city, if fire occurred there at the same time. The danger from this source is being rapidly reduced by the replacement of engine companies in their old locations.

Practically all the companies writing business in San Francisco today are receiving a large premium income at a minimum cost and with a comparative low liability. The operation of the law of supply and demand is certainly the main cause for these favorable conditions. However, I deem it fair to take cognizance of a liberalized public sentiment existing in this community. The public has been taught by a process, expensive to all concerned, not only the necessity of having insurance protection, but also to recognize and appreciate the fact that the great majority of insurance companies have responded to the stupendous demands made upon them and have fairly met their legal obligations.

The great seismic disturbance which shook our city last April also shook the insurance business to its foundations and prepared the way for radical changes in methods and policies which otherwise were difficult of attainment.

The credit rule is being satisfactorily enforced in this city for the first time, which is cause for congratulation.

A change has been made in the classification and remuneration of San Francisco brokers, the result of which has been to place a practically fixed cost to the companies on business. Undoubtedly, the average commission expense is lower than it has been for many years. This change, though unavoidably disrupting pleasant business relations, some of long duration, removed many absurd inconsistencies and trouble breeding conditions, and though susceptible of improvement by features of restriction and elimination is working well and undoubtedly has come to stay.

When we turn to the consideration of the present conflagration hazard in this city we naturally look first towards the Western Addition; the congested area between Van Ness avenue on the east, Market street on the south, Broderick on the west and Jackson on the north. Neither Broderick nor Jackson streets are actual barriers, but I have placed the lines there because the neighborhood north and west of these streets retain their residential characteristics to a great extent. This district, comprising about 300 blocks with an area of probably one and one-half square miles, prior to last April was looked upon as the field most worthy of cultivation for the production of preferred business. I still believe that under the then existing conditions our opinion was warranted. However, since then, the complete change which has taken place in the character and occupancy of buildings in this district has created such a radical increase of hazard, that when we consider the absence of any natural or artificial barriers in the whole section, many may feel justified in considering this locality a breeding and feeding place for conflagrations.

A district probably equally dangerous is comprised of that unburned portion of the Mission between, say, Harrison and Dolores streets, south to Army street. This section has not only changed from the same causes which developed the Western Addition into largely a frame business district, but it is menaced by the buildings erected and being erected in that portion of the burned district roughly described as lying between Twelfth and Twentieth, Harrison and Dolores streets. New buildings in these blocks are all of frame and corrugated iron construction, and many mills, wood and metal workers, laundries, garages, team-stables and other special hazards have found lodgement.

Therefore, the Mission district, as well as the Western Addition, possesses to a large extent the elements which breed and

develop conflagrations, without any of the retardent features which we ordinarily find in congested centers. There are no brick walls, sprinklered buildings, nor wide avenues to assist in checking fires. Personally, I believe that with an available water supply our fire department will find a large compensatory advantage in the absence of high and inaccessible buildings which will enable it to prevent a serious fire from becoming a conflagration. The earthquake possibility must be speculated upon by the individual underwriter according to his contract and his temperament.

Assuming that our water supply is not cut off, I see no danger of fire crossing Market street and communicating between these two sections. On the western side of the Western Addition district, even with deficient or crippled extinguishing facilities, a fire should be stopped on a line at about Baker street, running south on Castro street to its junction with Market street.

The Potrero, South San Francisco, Richmond, Sunset and other outlying districts are being built up with ordinary frame structures to accommodate the population needing shelter, but not to the large extent we would naturally expect owing to the fact that the increased price of land and cost of building prohibit the modest home-seeker from securing his own dwelling. While subject to severe fires in some blocks, none of these districts may be considered congested.

The strip several blocks in width on the east side of Van Ness avenue, from Clay south to Market street, consists of buildings, mostly frame, occupied for business purposes, and contains a serious potential hazard. There is a tendency towards the construction of brick buildings on a portion of Polk street which would indicate that the owners have faith in the permanency of that thoroughfare as a business center, as well as an inclination to conform to fire ordinance. Owing to the fact that few of the buildings on the east side of Van Ness avenue exceed one-story in height, and also that we are not subject to easterly winds, I do not consider this district a menace to the west side of the avenue. On the other hand, with our prevailing westerly winds, I can conceive of a conflagration which would cross from west to the east side.

There are few localities in the burned district where sufficient building has been done to constitute an area which can be termed a congested district.

Perhaps one of the most dangerous is that portion being

rapidly filled up with frame special hazards, with a mixture of dwellings, saloons and lodging houses, situated between Fourth and Ninth, Folsom and Townsend streets, embracing the Mill district. Many streets in this vicinity, as in all the down-town districts, are at present in bad condition, some being impassable, on account of sewer and railroad work and lack of repair.

The new wholesale district, comprising a few blocks of rough one-story frame buildings massed together between Sixth and Seventh, Irwin and Yuma streets, has the protection of an engine company, with ample water supply. Notwithstanding the undoubted care which is exercised over this property, it is almost prohibitive.

The Latin quarter, extending north from Broadway and east from Taylor street, is well built over with a good class of frame buildings, mostly dwellings, although business buildings are rapidly being interjected on some streets. At present there is no danger of a fire in this district extending south or west of streets mentioned.

Chinatown is the scene of considerable building activity, many "C" class brick buildings being under way.

None of the congested value districts as outlined in the Report of the Committee of Twenty of the National Board, exists as such today. A few frame blocks with some joisted bricks, compose the produce and commission district. There are also a few blocks in the vicinity of the water front, north and south of Market covered with buildings of small value. The great bulk of the area formerly occupied for wholesale and retail mercantile business is still unoccupied, though we may expect the results of our activities to be more manifest in the near future, now that enormous quantities of debris have been removed and other preparatory work done.

There is every indication that Insurance Offices will return to approximately their old location, and the probabilities are that mercantile houses will either gradually or concertedly return to the districts they found desirable before the fire. This element of uncertainty in regard to permanent location of business centers, may give rise to conditions creating a bad moral hazard. When the change comes, speculators in lease-hold interests in certain districts may suffer, also Insurance Companies.

The water system has been practically rehabilitated. Improvements have been made in some sections of the city whereby better protection is afforded than formerly. There is a 16-inch main on Fillmore street with high pressure. The district of Van Ness Avenue is protected by a 12-inch main on Franklin

from Ellis street to Pacific Avenue. Ellis, Sacramento and Pacific streets also have 12-inch mains in their vicinity, while Bush street has a 16-inch main. Hydrants have been installed to keep pace with building operations in all parts of the city with well maintained pressures. The 22-inch main on Valencia street has been carried around the soft ground by running a 16-inch pipe to Dolores street, where it enters a 24-inch pipe to Seventeenth street, thence a 16-inch pipe back again to Valencia street.

It would be very desirable to have the conduits supplying city reservoirs make a detour around the marshes where the earthquake did serious damage, but we need not expect to see that accomplished.

The Mission Promotion Association has done good work in interesting the Municipal authorities in the work of cleaning out and repairing the old cisterns. Seven of these are located in the Mission, five of them having each a capacity of 100,000 gallons. Two are now being repaired. This is the only reserve water system we can count on for some time.

The Ordinance is being enforced which requires private water tanks to have 3-inch outlets with standard couplings accessible to the fire department. The Water Company is also restricting the size of taps and connections with their mains for household, power, sprinkler or other purposes. This will prevent the rapid dissipation of water supply if buildings are destroyed by fire or otherwise.

The Underwriters Fire Patrol maintains two stations under the usual excellent discipline, one on Bush street, near Buchanan street, which is the center of the Western Addition, and another in the Mission at Twentieth street and Treat Avenue.

Fortunately, for all interests, the inspection of chimneys after the earthquake was placed under the supervision of the Chief Inspector of the Fire Underwriters Inspection Bureau. Over 90,000 certificates were issued, and flues which owners claimed would not be used were effectually closed.

There remain a few thousand chimneys which have not yet been repaired. Although fires may occasionally develop from this cause, it is undoubtedly a fact that the chimneys of the city, on the whole, are in safer condition than before the earthquake.

There seems to have been a tendency in some quarters to exaggerate the extent and seriousness of the fires which have occurred in San Francisco since last April, as well as depreci-

ating the efficiency of water service and fire department. No statistics have yet been arranged to enable us to make accurate comparison with corresponding periods, but I think that those who are in a position to note fires and fire losses, will be very much surprised if the ratio of losses to premiums during the last eight months is not below the general average.

While we cannot ignore the hazard existing in San Francisco through the fact that it is practically a frame city, and also that many of the buildings hastily thrown together since the fire are flimsy, improperly wired and otherwise defective—the consequences of which will be fires, and perhaps fires of serious dimensions,—nevertheless, I believe San Francisco at the present time is a profitable field for the prosecution of our business, under prudent management. Details of policy and method must necessarily remain subject to individual or official judgment, but I believe all who write San Francisco business will agree with me in the following conclusions, viz:

1st—Very conservative block and district limits;

2nd—Thorough inspection of risks, with careful consideration of surroundings,—not placing dependence entirely upon exposure or restricting clauses, but use of judgment and discrimination in selection.

In conclusion, I wish to pay a tribute to the citizens of San Francisco, constituting the assured, with whom we transact our business, many of whom recently have been and some still are loss claimants.

In honesty and integrity, the business men and property owners of this city are not inferior to those of any city, while they possess in a marked degree the qualities of patience, good nature under adverse conditions, broad-mindedness and no end of courage. The contrary reports which have been promulgated do not originate with, nor emanate from those who came in personal contact with many claimants during our late unpleasantness. (Applause.)

The President: I think you will all agree that Mr. Gililand's paper is one right to the point and in complete line with his subject. Has anyone any remarks to offer in connection with it? If not, we will pass on to the next number on the program.

Mr. Edward F. Beddall, of New York, who was here about two months ago, and spent some weeks on the Coast, was very much interested in Pacific Coast Underwriting matters and in

our Association, and on his return to New York, he wrote a letter to the Association. I have now the pleasure of asking Mr. Fogarty to read the letter of Mr. Beddall, which upon our program, is given the title

“AS OTHERS SEE US.”

New York, January 2nd, 1907.

F. B. Kellam, Esq., President Fire Underwriters Association of the Pacific—Dear Sir:—

“O wad some power the giftie gie us,
To see oursels as others see us!”

Thus wrote the famous Scottish poet. Assuming that you appreciate and concur in the sentiment expressed in these lines, I venture to bring to your attention certain defects and conditions, regarded from the standpoint of an Eastern Underwriter, which I discovered when making a recent inspection of the principal cities on your Coast, and which, it seems to me, could be easily remedied, if a concerted effort were made in that direction.

In addressing you as President of the Fire Underwriters Association of the Pacific, which I understand will hold its annual convention in the course of a few days, I am not unmindful of the phenomenal success that has attended underwriting on your Coast in past years, and I shall not therefore, even by implication, commit the indiscretion of claiming the possession of a knowledge of such matters superior to that of the members of your organization. My desire is merely to call your attention to certain points of danger, as they appear to me, and to invoke the aid of your association in advocating such measures as will result in their correction. The reports recently made by the Committee of Twenty of the National Board of Underwriters exhibit in full detail the defects found in your large cities. Nevertheless it can do no harm, I think, to comment on a few of them.

The recent disaster in the City of San Francisco has, as you know, swallowed up the accumulations acquired by the insurance companies generally in a century of underwriting. It has completely wrecked and ruined a number of the companies, while the resources of all of them have been more or less seriously depleted. This result in itself is bad enough, but still more harrowing is the ruin inflicted upon hundreds and thou-

sands of its citizens who previously had happy homes of their own, and who were living in affluence and contentment. These sad results have necessarily directed the attention of all, managers of insurance companies and property-owners alike, to the danger of conflagrations and to the measures which should be taken to prevent them. We know that in this land of ours—this "Land of the Pilgrim's Pride," more property is destroyed by fire every year than is consumed in the rest of the world over, and that in the size and extent of our periodic conflagrations, we, as in everything else, easily take the front rank. There must be some cause for this, and surely some remedy ought to be found to prevent, or at least to check, this evil. Apart from the destruction of the vast amount of property involved in these conflagrations, there is the disturbance of business and the loss of trade connections which they occasion. Indeed, the plight of a city stricken by conflagration is as pitiable as if it had been scourged by an epidemic. Surely then, since all classes suffer from such disasters, all ought to co-operate heartily in preventing them. Those best qualified by expert knowledge and experience to lead in the reform are the managers, special agents and agents of the insurance companies, and organized and concerted effort can the more effectively be made by associations such as yours.

The prosperity with which your section of the country is now blessed is truly wonderful. Nothing equalling it in the world's history, I believe, has ever been enjoyed before. New centers of industry are being established in every direction and your older cities are growing at a pace that surpasses comprehension, except by those who have witnessed them. The thought that those fair cities, the product of the industry, enterprise and thrift of your people, are exposed to destruction in a single night from causes which are surely preventable is sufficient in itself, regardless of self interest, to inspire one with a desire to utter a word of warning and to try and avert the doom which may overtake them.

As I have already intimated, the cities of other countries of the world are not liable to the conflagrations which curse those of the United States, and the reason is due to their better methods of construction, enforced by more stringent building laws. The idea in this country, apparently, is to erect a building that will give safe storage room for the property placed in it, and the fact that there is such a destructive element as fire seems to be ignored altogether. The City of San Francisco as it exists to-

day—pardon me for saying it—is a disgrace to a civilized community. Evidently those who have been instrumental in erecting those enormous frame structures and that mass of frame buildings without a wall to arrest the progress of a fire have been influenced by the spirit of old—“Let us eat, drink and be merry, for to-morrow we die.” Bad construction has gone too far there for us ever to hope for any material improvement, and the only thing in my judgment that can save what remains of the city from ultimate destruction by fire is a protective salt water system which could be easily and inexpensively installed.

In other cities, especially in Seattle. I find that while the construction is generally fair a very serious danger from conflagration exists, due to the neglect of property-owners to shutter, or protect by wire glass, the opposing windows overlooking courts and narrow alley-ways. These alley-ways are too narrow to enable the fire engines to operate from them effectively, and the consequence would almost surely be that if a fire should get any headway, the building across the alley-way, immediately opposite, would become involved also, and then with buildings adjoining of varying height and having unprotected windows overlooking the roofs on either side, a conflagration of the first magnitude might easily follow. To enforce the protection of these window openings should be the duty of your Coast Associations, and I know of no other or better way by which it can be done than by a strict system of schedule rating under which a heavy charge, so heavy indeed as to be prohibitive, is imposed for the absence of such protection. Assurances should at the time the rate was promulgated, be given to the property-owners that the charge would be taken off as soon as the change was effected and a rebate made of the charge for the unexpired term of the policy. This would satisfy the assured that the object was not so much to increase the rate as to correct the defect and thereby reduce the hazard. Such a campaign directed against these unprotected windows would, I am convinced, result in much good. In this (New York) City, immediately after the great Boston fire in 1872, an ordinance was passed which required that every window opening on a street, court, or alley-way, of less than forty feet in width, should be protected by iron shutters. Since then wired glass has come into vogue and experience shows that with metal frames it answers the same purpose. There should be no great difficulty in getting a similar ordinance passed in your cities also.

Another danger, and a very serious one as I regard it, I discovered on the occasion of my visit to your coast cities, and that is the storage in tanks of large quantities of petroleum along the water fronts. These tanks I found outside the cities of Portland, Tacoma and Seattle. Should they take fire, the burning oil would probably flow into the water and be carried away by the tide, and cause the destruction of the piers and wharves along the whole city fronts. Surely the attention of the authorities should be called to this danger, and ditches and bulkheads provided for keeping the oil out of the water.

One other suggestion I have to make and with that I will conclude. You have in each of your large cities, especially in Los Angeles, some department stores of great area and of very light construction, conflagration breeders of the most pronounced kind, which ought to be sprinklered. An alternative rate, one for the risk when properly sprinklered, which should be a reasonably low one, and another for the risk as it now stands, which should be practically prohibitive, would pretty surely accomplish what we desire. There are many other points which I would like to touch upon if time permitted it, but these seem to be the more important.

Trusting that you will have a very pleasant and profitable meeting, and with kind regards and best wishes to all of you, believe me to be

Yours very sincerely,

(Applause.)

E. F. BEDDALL.

Mr. Bates—Mr. President, I move that the Secretary be requested to write and thank Mr. Beddall for his letter. It is certainly very interesting.

Mr. Gunn—I second the motion.

The motion unanimously prevailed.

Mr. G. D. Dornin—Mr. President, I came in while Mr. Beddall's letter was being read, in which he was giving us some post-conflagration reflections upon the unwisdom of writing large lines in San Francisco as it is. And yet for twenty years, San Francisco has shown the lowest loss ratio of any city in the United States—27½ per cent. It is true we had a wooden city, but it is significant that the only part of the city that remains unburnt is practically entirely of wood. There may be nothing in it, but it seems to me that it is after all a question of a good fire department, and good handling. Some of those who have

visited us from the East, and who asserted that there are certain elements that they did not consider when they made their contracts, for example, the earthquake possibilities, broken mains, and possibly the death of the chief—and a better fire engineer we never had—failed to take into consideration that there were abnormal causes for our great fire, causes that are possibly likely to obtain elsewhere—though of course we don't know where they may be. I have in my hand a copy of the afternoon paper from which I observed the heading, "Kingston Destroyed. Earthquake Followed by Fire, Destroys the City." It merely shows that the United States is not alone in this liability to conflagration from that source. I only speak of it as a little reflection upon the part of some of us who have lived here long enough to know what the ordinary conditions in San Francisco are, and to know that the nature of building construction here is not the thing responsible for our late conflagration.

The President—I think Mr. Dornin may have misunderstood Mr. Beddall's references in his letter, coming in as he did after a part of the paper had been read. Mr. Beddall's references are to conditions at the present time, and not at the time of the conflagration, and principally with reference to the Western Addition as it is today, without fire breaks of any kind whatever. Mr. Beddall is a very practical man, and when he sees what he thinks are objectionable points and conditions from the Fire Underwriting standpoint, he endeavors to find a remedy, and to suggest it. It strikes me that he has made one or two very practical suggestions here, suggestions that it is well worth while considering, both in this body and by the Board of Fire Underwriters, or by the Washington Insurance Association, as the case may be.

Mr. Gunn—I have observed, Mr. President, that running through the papers that have been read today has been a reference to the incident of last April as "the earthquake." I am told that there are several thousands of affidavits on file in the offices here that there was no earthquake here last April, and perhaps it would be wise to correct the papers, and label it "the fire," instead of "the earthquake." (Laughter.)

The President—Our next paper this morning is by Mr. G. A. R. Heuer on "Simple Electrical Inspections."

SIMPLE ELECTRICAL INSPECTION IN CALIFORNIA.

G. A. R. Heuer.

So much has been said and written upon the subject of electric wiring that it seems almost unnecessary for me to burden you with a paper of this sort, but, as with few exceptions, the various text books to which my attention has been called are more or less technical in nature, it has occurred to me that a paper dealing with electrical inspection from the standpoint of a laymen might be in order.

Unfortunately there are many phases of electricity which cannot be correctly explained without the use of technical terms, and these I endeavored to avoid. One writer on the subject aptly states that an attempt of this sort "is like some translations from the classics, which, though losing some of their finest points in the translation and open to criticism from the eminent critic, still present the desired idea to the mind of the reader in a general way."

The electrical engineer and the expert inspector will become tired of hearing what I have to say—they have heard the same many times before, but the laymen, if he be anxious to learn, will, I trust, appreciate my efforts. This paper does not take up somewhat intricate inspection of power houses, the winding of dynamos or motors, or the calculation of the proper sizes of wires to be used for a given current, only subjects of a primary nature are discussed, and I have purposely avoided lightning arresters, as they are seldom met with in California.

We are all of us familiar with the common water pipe, how the water is conducted by it into a building, and how the various faucets about the building are attached to it. Here then we have an analogous example with the following exceptions: Unlike water and like some Special Agents, electricity is constantly doing its level best to return to the place whence it came, and is not at all particular about the course it takes—the shorter the way the better. A piece of damp wood, a gas pipe, a water pipe, or any kind of metal is a source of joy to this elusive thing called the "current of electricity."

The duty of an electrician therefore, is to so wire a building as to absolutely control the tendency. If he did, there would be no need for inspections. Hasty work, incompetent workmen,

and general carelessness make what should be the safest method of lighting, sometimes the most dangerous. Water will flow through dry space; electricity will not, unless the pressure be great, or the space be very small. Dry space is one of the best insulators known to us, as it offers the highest resistance to the electric current.

Somewhere, perhaps miles away, we have a great power plant with dynamos working overtime, generating the electric current to be used for lighting and running machinery. Like the water we use, the current comes to us through heavy pipes or power wires. No one would think of allowing a thirty-two inch water main discharging a tremendous amount of water at an exceedingly heavy pressure, to enter a building, neither would an electrician think of permitting a high pressure power wire, to do the same thing. The owner of the water pipe reduces the pressure, so does the electrician.

This he does by means of a transformer. A transformer is usually an iron box containing coils of wire, so disposed around a core as to convert small currents at a high pressure into large currents at a low pressure. All of this may be clear enough to the expert, but what does it mean? the layman asks. Simply this. In connection with water pipes we refer to pounds pressure, gallons delivered, and frictional loss. In electricity we use the terms volt—equivalent to pounds pressure; amperes—equivalent to gallons delivered, and ohms—equivalent to frictional loss in a water pipe. It is a common mistake to think that when we speak of a current of electricity we mean the voltage. That is not correct. What we mean is the amperage. When we mention the number of volts we mean the amount of pressure necessary to force the current (designated by amperes) through the wire. Wires, like water pipes, present quite an amount of resistance to the current forced through them, but instead of bursting as water pipes would when the pressure becomes too great for their size, they overheat. It is therefore apparent that the higher the pressure, the more dangerous the installation of electric wiring becomes. Suppose for the sake of illustration there are two thousand volts forcing a current of one ampere over the power wire, the duty of the transformer would be to reduce this current to twenty amperes at a pressure of one hundred volts, thereby giving the larger current at a low pressure.

There is another term used by electricians called the watt. This is used to designate the unit of electric energy, just as the foot pound is used to designate other forces, and is obtained by

multiplying the number of volts by the number of amperes, thus: two thousand volts multiplied by one ampere would give two thousand watts; so would one hundred volts multiplied by twenty amperes. In these examples I have used the amount of pressure and current mentioned in my explanation of the transformer in order to illustrate that the electric energy remains the same, even though the voltage has been reduced for safe purposes.

Sometimes a coil in the transformer becomes short circuited, and then we have trouble. The transformer becomes heated, and, if placed near anything combustible, will set it on fire, therefore the Board of Underwriters has ruled that all transformers should be kept out of buildings or placed in fire-proof rooms. Let the assured keep a little gun powder in his building if he wishes to, or maybe some gasoline, but never a transformer. He knows more about the danger of the gun powder and the gasoline, and consequently respects them to a sufficient extent to take necessary precautions. The transformer is such an innocent looking piece of apparatus that, try as he will, he cannot conjure up enough respect to properly protect himself against its dangers until it is too late. I saw one of these transformers explode a short time ago. Fortunately it was located on the top of a telegraph pole, and, while numerous sparks were thrown in every direction, no fires ensued. This transformer, I presume, was oil cooled and that is what contributed to the explosion. The telegraph pole is the best place for the transformer and that is where the inspector should find it. Presuming that this is where it is placed we are now confronted with the problem of running the wires therefrom into the building and attaching the various lamps, motors, etc., thereto.

One pipe, the positive wire, allows the current to enter the building, and the other pipe, the negative wire, allows it to pass out. The lamps are fastened to these wires and when we wish light we simply turn them on. A portion of the current is permitted to flow through the lamp exactly as water through a faucet, and light is the result.

Suppose that, by some accident, a current at a higher pressure than intended should flow into the building through the feed wires, what would be the result? The wires not intended to carry such a load would heat, the insulation would probably burn, the molten pieces of metal would fall on some combustible substance, and an adjuster would have to be sent for.

The Underwriters, as a result of such experience, have ruled

that all wires entering a building should be covered with water and fire-proof material, and that they should enter the building and depart from it through tubes called bushings. These are made of non-absorbent and non-combustible material (usually porcelain), and should slant downward, toward the outside, to prevent moisture from entering the building. The wires entering through should be provided with drip loops.

A drip loop is made by bending the wire into the form of a letter "V" before it passes through the bushing—the bottom of the "V" being several inches lower than the point of entrance precludes moisture from running along the wires through the bushing. The end of the bushing must be sealed with tape, thoroughly painted, and securing the tube to the wire.

Switches should be placed on all service wires, and as near their point of entrance as possible, for the purpose of cutting off the current. If the main switch could be placed outside so much the better.

This switch, which is a device for turning the current on and off, is usually copper blades operated by hand. It should be installed upon a non-absorbent, non-combustible insulated base, such as slate or porcelain, and should hang down when open.

Fuses must also be placed on all service wires as near as possible to the point at which they enter the building, also at every point where a change in the size of wire is made.

But what is a fuse, you ask, and what is it there for? The name almost explains it. It is a piece of soft metal designed to melt from excessive heat, which is always generated when an excessive current passes through any wire. It is the weak link in the chain, and would be illustrated by joining a small water pipe to a large one by means of a thin rubber tube. If the pressure in the large pipe became too great for the small pipe to carry, the rubber tube would break, and thus sever the connection.

It is therefore understood that fuses are used simply to prevent more current from passing through a wire than its safe capacity allows, and, wherever placed, should be so arranged as to open the circuit before the wires which they protect will be carrying more current than they are able to take care of.

Even at best, fuses are sluggish in their action, especially when of large size, and, therefore, the greatest care should be exercised by electricians in selecting those of proper size, which should be mounted on a non-absorbent, non-combustible base. A fuse acts exactly as a switch does, only its action is automatic.

The inspector should be careful to see that these fuses are not replaced by copper wire. The writer's attention has been attracted to this feature a number of times. Once, while inspecting a fruit cannery, this defect was noticed, and, in explaining his reason for making the substitution, the engineer of the plant said that the steam from the cooking room had permeated the insulation on the cords sustaining incandescent lamps, and the short circuits resulting had blown out the fuse so many times that he had become tired of substituting new ones, and had used copper wire instead, "this time." Fortunately the cannery had closed down after this unconscious act of incendiarism, and, sometimes in my idle moments, I wonder what the percentage of loss would have been if it hadn't.

All inside wires of opposite polarity not in conduit, should be kept at least one-half inch from the surface over which they pass by porcelain supports, and should be at least two and one-half inches apart on ordinary lighting circuits, or where no greater pressure than 300 volts is used. When over that amount is used, the wires should be kept one inch from the surface and four inches apart. By opposite polarity is meant the positive and negatives wires.

By a short circuit is meant the flow of the current through some path which presents less resistance to the electric current than the installation to which the electrician intended to confine the same. This will occur when two wires of opposite polarity become accidentally connected by a piece of metal or moisture. The contact is always mechanically imperfect, and as a result considerable sparking is caused, which is apt to start a bad fire. It is sometimes erroneously supposed that a break in the insulation of a wire necessarily means a short circuit by arcing. This is not the case. A naked wire in a dry place may be reasonably safe, but introduce a little moisture or a piece of metal to connect it with another wire and a short circuit results.

This was the cause of a bad fire brought to my attention. The electric wires in this case were run in conduits through a channel adjoining a metal lined air shaft. In fastening the metal lining of the air shaft in place, nails were driven through the conduit containing the electric wires. The vibration of the building caused the nails to wear away the insulation. The arc resulting set fire to the insulation, and this, in turn, set fire to the building. Loss \$60,000.

Assuming that the inspector has found the feed wires, switches and fuses properly installed, his attention will now be

attracted to the method in which the various lamps are attached. The Underwriters have ruled that no set of incandescent lamps, requiring more than six hundred and sixty watts should be dependent upon one cut out. You will therefore readily see that we must divide our lighting system into circuits of twelve sixteen candle-power lamps where we have a pressure of one hundred and ten volts. A simple calculation will show why this is so. One sixteen candle-power lamp consumes one-half an ampere, twelve would consume six amperes. We therefore find that a circuit of twelve sixteen candle-power incandescent lamps will require six amperes current, at one hundred and ten volts. Multiply one hundred and ten volts by six amperes and you will have six hundred and sixty watts. A branch circuit of this sort should be protected by a six-ampere fuse, no more. It is better to use only ten lamps on a circuit of this sort, as sometimes a property owner will attach a 32 candle-power lamp in place of one of 16 candle-power. This of course overloads the circuit, and if we leave a little leeway by omitting two lamps and still use a six-ampere fuse, we are adopting a much safer method of installation.

By being forced to divide his lighting system into so many circuits, we find that in large places the electrician must string a good many branch circuits which, in connection with the feed wires, can be likened to a system of reservoirs and the connecting pipes. The main reservoir at a high elevation, supplies two smaller reservoirs at a heavy pressure, these two in turn supply four, which are at a still lower elevation and which supply eight other reservoirs, still lower in elevation. The whole scheme results in a gradual reduction of current. This is what the electrician is striving for. He doesn't want too much current where it is not required, so when he wishes to run a branch of wires he taps the feeds, protects the new circuit by a fuse and attaches his lamps. The mechanical work at these points should be perfect, as a loose joint will cause sparking. Wherever lamps are attached to wire, rosettes should be used, except in damp or dusty places where weather proof sockets are recommended.

These are made of porcelain and insure perfect mechanical connection. They will be at once recognized when seen. Incandescent lamps can be supported by wires to which they are attached. Arc lamps should have other means of support, as they are too heavy in construction. Each arc lamp should be protected by a fuse the same as a circuit of incandescent lamps. All inside wires except cords attached to incandescent lamps,

should be fire and water proof, and so should the latter, in places such as the cooking room of the cannery previously mentioned in this paper. Why the Underwriters have not ruled that they should be fire and water proof at all times I cannot understand, but as they have not done so we of course cannot insist upon it.

There are four common ways of wiring a building for lighting purposes, namely, the multiple system, the series, series multiple and the Edison three-wire systems. In the multiple system we find two wires, the positive and the negative. The current is pumped by the dynamo through the positive wire, and from this wire it passes by the negative wire back into the dynamo.

The pressure is always the same, and the amperage varies according to the number of lamps used on the circuit. The lamps are attached to both the positive and negative wires, and, when we wish light, we turn on a lamp. This causes a portion of the current to flow through it, and light is the result. If we turn on the lamp next to it, still more current is passed through the wires and is taken up by the lamp. We can have one lamp burning or all burning as we will. This system is very common.

In a series system, the lamps are connected in series to the positive wire, and the current is forced, just as water would be by a pump, first through one lamp, and then through the next one behind it, until all lamps on the circuit are supplied. In this system the amperage or current remains the same, but the pressure or volts increase as the current is forced further and further along the wire, on the same principle that it requires a greater pressure to force one gallon of water through a one hundred foot pipe than through one of fifty feet. This system is practically obsolete and you will not often run across it, unless it be in connection with arc lamps. Lamps of this sort strung in series should always be outside.

A series multiple system is a combination of the series and multiple plan. The wires are run just as in multiple wiring, and the lamps, we will say, for the sake of explanation, are connected in series of two to the positive and negative wires. This system is no longer approved.

The Edison three-wire system consists of three wires, the positive, negative and neutral. It is designed to take the place of two lines of multiple, and results in a great saving of copper, and at the same time permits the electrician to carry a current a longer distance than by multiple wiring, without great loss. Two dynamos connected in series are usually used in a system of this sort and the two discharging a current of five amperes at one

hundred and ten volts pressure create a difference of pressure of two hundred and twenty volts between the beginning of the positive and the end of the negative wire.

The wires are strung as in multiple, but the lamps are really in series of two; one attached to the neutral and positive wires, and the other attached to the neutral and negative wires. Presuming that each dynamo is generating its full amount of current and all the lamps on both sides of the system lighted, the circuit will be absolutely balanced, and the third or neutral wire will not be in use. If we turn off one of the lamps, however, (say one on the positive side) our system will become unbalanced, as we have five lamps on one side requiring two and one-half amperes, and four on the other requiring only two. Here is where the neutral wire comes into use. A current sufficient to make up the difference in the loads between the positive and negative wires will flow out upon the neutral wire and the balance will again be restored.

Suppose for the sake of example we have two water wheels, one on the right side of a building, and the other on the left. They are supplied with water by two pumps, four pipes are used, two for each water wheel. One carries the water to the wheel and the other carries the water away from it. Now, if we wanted to create a saving in pipe, we would connect the two pumps and the two water wheels together and use only two pipes, one leaving the pump at the right side of the building and carrying the water to the water wheel on the same side. When the water passes through this wheel it flows from it by the connecting pipe to the wheel on the left. From the wheel on the left the water returns to the pump on the left and then is sent over the same course again.

If we had this sort of an arrangement, and for some reason or other desired to turn off the water wheel on the right it would naturally result in the wheel on the left being stopped also. Now to so arrange the system as to be able to work the water wheel on the left while the wheel on the right is turned off and still create a saving in pipe, we would run a third pipe from the pipe connecting the pumps to the pipe connecting the water wheels. When the water wheel on the right was turned off, the third pipe would then carry enough water to the wheel on the left to run it, and we would have an analogous example of an Edison three-wire system. It is difficult to thoroughly explain this system without becoming technical, but I think if you will follow carefully what I have just said you will receive a slight

knowledge, at least, of the principle evolved. The third wire on this system is never fused. The latest rulings on electric wiring do not recommend the system for small branch lines, but only for main service and feed wires.

Wherever wires cross one another they should be protected from each other by porcelain tubes, securely taped to the wires so that they will not slip and cause a contact. This same rule applies in all cases where the wires may come in contact with water pipes. It is better to have the wiring run above, rather than under water pipes as there is not so much danger from moisture.

Whenever inside wires are run through partitions, bushings should be used. Wires strung on ceiling joists to which the shafting of machinery is fastened are not safe, as the constant vibration will in time cause the wires to sag, and there is always a danger of short circuit.

Sometimes an inspector's attention will be called to a box-like affair with various metal contacts like brass buttons fastened to its face and a handle attached so as to move across them. This is called a rheostat. It has various trade names and is used for various purposes. It is sometimes called a starting box, dimmer, and resistance coil. It is to the electrician what the throttle is to an engineer. It is constructed of numerous coils of wire calculated to present a resistance to the current in order to lessen its flow into a lamp or motor, as the case may be. We find it used to start motors, to secure lighting effects in theaters and in connection with every bit of wiring where the assured does not wish a full current all at once, or desires to modify or vary the same. Like the transformer, this rheostat is in danger of overheating owing to the resistance which it creates against the current it is reducing, the energy being transformed into heat.

Fortunately the limit of current which will pass through it is known, as it is always on a circuit protected by fuses and a transformer. Particular attention should be paid to the installation of the rheostat which should be kept away from any combustible substance and mounted on a non-absorbent, insulated fire-proof base.

All motors should be carefully watched to see that there is no danger from flying sparks occasioned sometimes by the brushes wearing down. The induction motor is the safest, the spark hazard being practically eliminated.

Sometimes we will see a number of small motors used to

operate an equal number of machines instead of one motor for all. This is done to secure a saving in power. A smaller current is used and it is not necessary to use the limit of power when operating only one machine.

Look carefully at the bottom of the elevator shaft in all buildings having electric elevators to see how the starting box (rheostat) is installed. It should be free from oily waste or any thing inflammable; so should the motor, which is usually found at the bottom of the shaft. The best way to install elevator machinery of this type is at the side of the shaft in plain view. When inspecting dry goods or clothing stores, look carefully at the motors connected with the various sewing machines used in the tailor shop.

Pay particular attention to the rheostat used to start these motors. Usually you will find the motors in some obscure corner half covered with cuttings. Think what a fine food these cuttings would make for sparks. Sometimes you will notice the rheostat used to start the motor stuck up against the baseboard. This should of course be remedied unless all the rules for safe installation are observed. Look out for the electric sad iron. The employes have developed a habit of leaving these with the current turned on when they start for home. A lamp called the telltale should be attached to the circuit connected with these irons. When the current is on, the lamp is lighted, and everybodys attention will be called to the fact. No incandescent cords should be permitted in show windows—the Underwriters allowing only patent fixtures.

While inspecting the lighting system in theaters or public halls see that the main switchboard is well away from the wall, so far as to easily permit a person to examine the same from the rear. The dimmer (another form of rheostat) should be carefully watched to see that it is in no way connected with any inflammable substance. It is used to reduce the current at will in order to secure dim light effects. In its reduction of the current it often becomes very hot owing to the frictional resistance, and this fact easily explains the danger. Watch carefully to see that all wires connected with incandescent lamps are of a heavy nature, as the moving about of so much scenery and other appliances on the stage is apt to cause their injury. All of the sockets used for lamps should be of extra heavy construction for this same reason.

Look carefully at an installation before you condemn it, as there are many electrical appliances in use in up-to-date installa-

tions which have not been touched upon in this paper. The National Electric Code is the guide for all insurance inspections and the latest edition should always be in a Special Agent's possession. Do not be content with the little I have touched upon, but keep up the study of this somewhat difficult subject and you will be rewarded by the personal satisfaction the mastery of any problem brings you. (Applause.)

The President—Gentlemen, it seems to me that I now understand one or two things about electricity which I have never understood before. I think the great value of Mr. Heuer's paper is that he has put the matter in such simple language. Are there any remarks to be made upon the subject of Mr. Heuer's paper?

Mr. Sewell—I would congratulate my young friend on his paper. One suggestion I would offer is that in making inspections as suggested in his paper, he look to the location of the transformers across the street, where the wire comes from the transformer into the building over a trolley wire. I have encountered that, and cases where by some accident the cross wire from the transformer got broken or sagged and touched the trolley wire and sent the current into the building in such quantity that it went through the fuse box just like a bullet through a piece of paper, and caused a serious damage. The location of the transformer is a matter that I think should always be looked into.

Mr. Heuer—The fuse should really take care of that, as that is what it is there for. We cannot tell what is going to happen between the transformer and the building, and cannot control the location of the transformer in every case, and so the fuse boxes should be so constructed as to avoid any chance of difficulty there. Sometimes you cannot depend upon the insulation, and where there are many wires there is no telling what is going to happen. But I appreciate the suggestion of Mr. Sewell, and in the future where it is possible, I shall look to that feature.

The President—Are there any further remarks upon Mr. Heuer's paper? If not, we will proceed with one more number

upon our program, that by Mr. R. W. Osborn, entitled "The People vs. Insurance Companies. Argument for the Defense—Judge Horsensense."

Mr. Osborn—Mr. President and Gentlemen: As prefatory, I beg to announce that this is the argument against an indictment found against the Insurance Companies, and the case tried in Court of Public Opinion, and it is now on appeal from judgment in that court in which the companies were found guilty. The title of the case is "People vs. Insurance Companies. Indictment No. 23. Judges Reason and Lore sitting in banc." General Prejudice appears for the people, and Judge Horsensense for the defendant. The argument that I shall read to you is that of Judge Horsensense for the defense. You will please consider yourselves as sitting in the court room listening to the discussion.

APPEAL FROM THE COURT OF PUBLIC OPINION. PEOPLE
VS. INSURANCE COMPANIES. NO. 23. JUDGES
REASON AND LORE SITTING IN BANC. GEN-
ERAL PREJUDICE, FOR THE PEOPLE. JUDGE
HORSESENSE, FOR THE DEFENSE.

May it Please the Court:

As we con the pages of the indictment against the defendants, we are reminded of Macauley's review of "Burleigh and His Time" by Dr. Nares. He says its title is equal to an ordinary preface, its preface about the size of a book, and the work itself as extensive as a library. There are no less than 2323 counts in this complaint and each one is a volume in itself. It comprehends every crime in the decalogue and even those of which Moses never heard. It would require a mountain of stones instead of two, on which to alone inscribe their titles. We say this with due regard for the zeal which has made possible this remarkable prosecution, and we doubt if anything has been omitted. But may the Court indulge us if we depart from the subject for a brief moment and recite the conditions which made possible this indictment.

The catastrophe of April 18th, 1906, was anomalous. It was without a parallel in the world's history. To the wholly

imaginative or superstitious mind it presented certain aspects of fiction. To the logical mind its phases were unique but rational.

Certain parts of the city were built on made or filled ground, some of it made boggy and soft by subterranean waters, and many of the structures built upon this land were imperfectly constructed. The water mains distributed through that part of the city were embedded in those lands and passed from the source of supply through swamp soil. When the earthquake came, this ground sank, varying from a few inches to a number of feet. This burst the mains and the water supply was cut off.

Fires from crossed wires, broken furnaces, overturned stoves and lamps simultaneously started in many locations and spread with such rapidity that it was not long before each separate fire united with that of its neighbor in one grand march to destruction. The day was perfect, warm and without a breath of wind. Nature seemed to conspire with the fire-fiend to accelerate a process already begun. Human ingenuity was paralyzed, resource seemed impotent, and the maddened flames made an aggressive march, beleaguering the stricken city, forcing the retreat of courageous effort, of hope and of sanctified struggle. Everything made propitious the war of the elements and as, in the approach of Alexander the Pamphylian Sea receded, so our beautiful bay seemed to smile in mocking glee as the fiend gathered within its folds the countless treasures of art, tradition and of commerce, leaving naught but devastation and ruin. Here and there a broken column, an arch, or the facade of a once stately structure, reminding one of the ruins of Greece or the dolmenic remnant of an ancient tomb.

But yesterday a city proud, vieing with the world, with unparalleled natural gifts, and those of accumulated heredity. A people happy, prosperous, and endowed with a princely hospitality that had not lived in tradition alone, but which was and is the very fabric of its life.

The sight was awful. Affluence nestled its aching head on the bosom of penury. There were tears in the eyes that never weep. It was a leveling of souls; there was no music save the dirge, no words but prayer.

It is truly impossible to chronicle the events of the week succeeding the fatal day. The average person was insane, all was chaos. The city was draped in the shades of sorrow. The blackened hills gave forth the mute echo of public lamentation, those hills of eternity which had so proudly arched the horizon where sets the sun in its majesty of color and serenity of imposing grandeur. It was dejection, complete surrender, and for the nonce all seemed to pass from the beauty of the Acropolis into the dread quarries of Syracuse.

Will the Court please bear this in mind! It has sequent relation to the argument which we shall offer in defense of those who were tried and adjudged guilty; but which verdict we are constrained to submit was conceived in prejudice and contrary to the evidence. Let us commence with the postulate that all claimants and all companies were not dishonest, and another that most companies and most claimants were honest. We are then left with the logical inference that some claimants and some companies were dishonest. Granted.

The Court will please bear in mind that indictments were found against every company doing business in the City of San Francisco, but were promptly dismissed against a few upon such a showing as the Court considered sufficient. Of the remainder, he who pleads before you has the honor to represent those which form a class by themselves, and it is of record that we do not appear for those who avowedly repudiated in whole their contracts under the guise of the act of God. For this latter class we hold a mental reservation too pronounced for expression and wholly inappropriate for concurrent utterance. This latter class, without a single condition to favor their position, seemed diseased by a greed, fed by profit and nourished by the lambent light of expectation. They supped of the wine of ecstasy only to stupefy their sense of justice and then partook of a far deadlier potion to deepen the malady. Their contentions are purely legal fictions without merit before a tribunal designed by the sovereign genius of state to adjudge a remedy for a right. They are a mournful tribute to commercial integrity or professional honor. For them impending disaster sounds its note of warning, carrying it through the reluctant air of our great commonwealth, across the vast ocean into foreign climes.

Conservatively speaking, the value of property destroyed in San Francisco was about four hundred millions of dollars, and with equal conservatism the insurance companies were liable for possibly two hundred millions, a sum so stupendous that it far exceeds the total of property loss of these entire United States including Canada, for a whole year. No other country in the world could suffer so immense an annual drain upon its resources and wealth without imperiling its existence. And yet this vast sum has been paid, the debt liquidated without a financial panic or a serious impairment of resources. It comprehends more, it is the highest tribute to the genius and sagacity of American financing.

The insurance companies involved in this terrible catastrophe had their holdings invested in securities all over this country. Many of them invested in the same securities, and it became a momentous question as to how best to avoid a serious panic, involving these investments. A false move, or undue haste would have resulted in frightful depreciation of values and consequent impairment which, pro tanto, meant an inability to meet any appreciable percentage of their obligations. The situation demanded calm deliberation, concerted action. It required temperate discussion to avoid disaster, and we venture the suggestion that this Court will grasp the situation and concede the wisdom of defendant's attitude. Delay was necessary, nay, it was imperative, and it operated along the lines of beneficent achievement. This, with other misfortunes, such as the loss of records, the fear of opening their vaults, and the slow movement of recovery from the awful blow created misconception in the minds of loss claimants.

Then came the press with a keen scent for sensationalism and a disposition to exert a disquieting influence. These huge vehicles of news sought to acquire prestige by savagely attacking the defendants, through a system of preachment and of villification that was both astounding and shameful. Impassioned articles appeared daily to incite rebellion and provoke a sentiment of distrust. They menaced the opportunity for fair discussion or early settlement inspired possibly by the hope of private gain, veiled within the demands of public necessity. For a time the offices of these papers were the Mecca to which dis-

honest claimants made daily pilgrimages, but they shed no tears upon the black stone concealed within the sacred Kaaba. Happily this changed, the press in a measure atoned for its wrong.

Following the press came the legal profession, and here I hesitate to speak in deference to this honored Court, which personifies a type of men who grace a noble profession. But I speak of and allude to the invasive hoard of suctorial pests who are "the worm and the maggot of the law." Of them my arraignment must of needs be severe, but sharp as it may be, it is but the apostrophe to that impeachment which history shall yet record. Lord Brougham defines a lawyer as a learned gentleman who rescues your estate from your enemies and keeps it himself. This eminent chancellor must have foreseen this great conflagration.

These creatures of the law completed that which the press had left undone. They excited the suspicions of honest men and dressed their speech with inventions of fancy that for a small retainer they would guarantee to demonstrate. "But lo! the poor Indian whose untutored mind" seemed to yield to the rapid currents of emotion and a sense of the dramatic situation! Such, your Honors, are the real plaintiffs in this case, naught but railing accusers bereft of the higher motives, mere adepts in the art of intrigue and the perversion of the spirit of law. Men who stood for the Machiavelian spirit as our language adopts the word, but singularly deficient in those points of character that were the true standard of the Italian statesman. It was this element more than any one other that created the breach between the people and defendants, that widened the gulf and made it less possible for a union of interests. Their attitude, your Honors, was most offensive and at once incited the rebellious spirit in those companies. I shall not presume to extenuate for the mistakes of defendants other than to assert that many of such were inspired by lawyers whose chief occupation seemed to be that of the meddler and whose principal argument was an accumulated invective, refined only by repression. There were those, however, who served their clients well, who were the beacon lights in the storm-tossed sea of uncertainty. They sounded those monitions of conscience

that finally assumed the phase of the inward monitor. These men comprehended the situation and entered the arena of honest doubt where struggled the combatants for the mastery of light, and their services were non sine gloria.

Recurring to those few eventful days, we then can understand how limited and inaccurate must have been the observations of men. How incompetent was the average person to estimate the extent to which the earthquake did its damage. We thus can account for evidence at once contradictory and extravagant. Added to this was the gradual unfoldment of the awful position arising out of the contract conditions. Was it not human for the tongue to throttle the conscience, for the eye and the ear to have seen and heard nothing? The lie was the muniment behind which the weary soul sought refuge and the people stood together, linked like chains of steel to fight for their all. Friend helped friend, and lied for him if necessary, for "to lie for a friend is friendship's first duty." And what of the defendants who, like the Greeks in the quarry, were forced to the walls of stone! Ah, here we are confronted with the demands of fury, threatened with a hate more deadly than the venom of the serpent, pressing on and on, urged by a hostile press and guided by minions of the law; but—let us reason together:

The average man looked upon a policy as a gamble, a wager that his property some day would burn, and if the contingency insured against were to happen, the sole duty of defendant was to pay. The insurance policy is an instrument grown far beyond its original purpose and through a process of evolution has reached its present status. Its changes are remarkable and are consequent upon the development of the times. In its original draft it comprehended the intention of the insurer, but some courts have given to it a meaning quite apart from that. Black was made to mean blue, and then perforce these companies changed the word to "blue," but the mutability of language again created distinctions and "blue" became "green." When defeated, these companies would reconstruct to conform to these rulings, not to impose greater restrictions but to strengthen the original intention. By experience they evolved the present contract which clearly sets forth

the measure of protection and their rates were based upon the exemptions, restrictions and other aspects of the policy.

These conditions and exemptions in a policy are the only safeguards the companies have, the only means of confining their liability to such measure as they have figured that the premium will profitably assume. To enlarge the scope of the policy, to admit greater liability than designed, would require a complete change in the rate and method of underwriting. We are surprised, the extent to which the courts have created new contracts rather than to give meaning to alleged doubtful words or phrases. Every clause, phrase or word has its intended meaning which seems as clear as legal ability could possibly make it and yet each year new and fantastic meanings are ascribed to them. They complain because the language is technical, and yet if simple words were used the result would be lamentable. Note the division of the United States Supreme Court as to whether "the date of the loss" meant when the fire commenced or sixty days thereafter. This Court will surely agree with me that the insurance policy is a contract with all of the binding force of a solemn agreement, to be judged by its terms and its intention. That its demands are sometimes exacting does not lessen its power as an instrument of obligation. That its forfeiture is a hardship does not create immunity for him who is injured. In normal times each one of these defendants is most generous in the interpretation of its contract, but when its life is imperiled it must of necessity stand for its legal rights. The assured never pays more in premium than he has to; his sense of charity is never awakened for an insurance company, and yet he asks charity, demands latitude, but yields neither.

These corporations are not charitable institutions a whit more than is a factory. They undertake certain obligations, subject to certain stipulations. These conditions are evident. Counsel for the prosecution rants about the small type, but this Court must admit that in contract obligations not the size of the type or the seeming injustice of results should be considered, but rather the reason for their existence. "Ignorance of the things which one is bound to know does not excuse," is a trite maxim; and "to be able to know is the same as to be obliged to

know," is another of equal force. When the reason for certain stipulations is obvious it is not for courts to impute to them a meaning adverse to their spirit and intention. In unilateral contracts we grant that the most favored meaning should be ascribed for the benefit of him who did not frame them, but this doctrine must not apply so as to annul the avowed intention and thereby violate the sanctity of the contract.

Then it must be remembered that these contracts were created by the Legislatures of some States and the defendants forced to adopt them in such States, thereby emphasizing the theory that the insurance companies were merely using statutory language and provision. In this State its general adoption was voluntary and to maintain a parity of interests and a concurrency of obligation. However, they none the less embodied the theoretical principle of underwriting and therefore represent the intention of the insurance companies as well as that of the Legislature. How often do we find the insuring public asking a company to explain the meaning of this or that condition which may not be understood? Seldom, if ever.

Many of defendants lost their entire surplus and stockholders, not uncommonly widows, were compelled to go into their pockets to meet the corporate obligation, and it is they who inquire why a claim should be admitted for which there was no liability. This business is insurance, not charity, and they are right in demanding the fulfillment of their obligations only. There is the rub! The tyranny of circumstances is awful but not more so for the one than the other. Your Honors, these companies issue contracts which in contemplation of law are the measure of their obligations. No one may assume the right to question a company for refusing to depart from the letter and the spirit of the agreement. It may be a hardship, it may entail misery, but it is not fair to invoke sentiment as a law or a right.

Now as we review this motley procession of events, are we not to be congratulated upon the result? Think of the restoration of the home, the business, and the upbuilding of our great city, a city which cannot be crushed, a city portraying all of the historic spirit of the mighty Spartans, with the added luster of crowning achievement. Who have done more to make possible

this result than the insurance companies against whom rests the stigma of an indictment? Let us disregard the sharp invective, let us forget how the people entered defendant's domicile imbued with hostility and infected with prejudice, and remember how finally both met in a masterful understanding of the motives and premises of each other. Recall that over this great ocean of passion came a tideless calm, scarcely less forceful than the gentle rescission of water from the sandy shore. There are, your Honors, in this callous world a number who forgive and many who forget. If we reversed this indictment, which events seem to make possible, you would there find these great companies dressing their wounds in silence and with no feeling of hatred. Mutual contract demands mutual fulfillment. Fair play is a dominant factor in American life. Must there be recorded against our people a violent exception to the rule? Let the judgment be quick that the world may continue to believe in the honesty and fairness of this western commonwealth. (Applause.)

The President—Mr. Osborn has given us a decided treat. His paper is one that we shall long remember.

The chair will now entertain a motion to adjourn until tomorrow morning.

On motion, duly seconded, an adjournment was at this point taken until the next day, Wednesday, January 16, 1907, at 10 o'clock a. m.



SECOND DAY.

Wednesday, January 16, 1907.

President Kellam called the meeting to order at 10 o'clock.

The President: Before proceeding with the next paper on our program, I desire to remind you once more to hand in your names and addresses to the Secretary, if you have not already done so, so that he can complete the roll of members of the Association. I will also say that the Chairman of the Dinner Committee requests that any additional names for the Banquet this evening be handed to him before one o'clock, and any of you who are interested in seeing where seats are assigned you at the banquet table will find a diagram showing the same at Mr. Spencer's office of the Aetna Insurance Company at 514 California street, above Montgomery.

We will now listen to a paper by Mr. W. J. Miller, entitled "Class 'A' Construction from the Standpoint of the Architect and Architectural Engineer."

Mr. Miller—Mr. President, and Members of the Association: Before reading this paper, I will say that, considering the experience we poor architects had shortly after the fire in connection with the adjustment of losses upon certain lines of insurance, I am now experiencing somewhat the feeling of my good friend Daniel when he entered the den of those noble animals. (Laughter).

The paper that I am about to read is one of general character, containing no technical matter. I wrote the paper along those lines at the suggestion of your President, so that the paper is of more of a popular character than otherwise, giving you our general relations to this type of building. The paper is

entitled "Class 'A' Construction from the Standpoint of the Architect and Architectural Engineer."

CLASS "A" CONSTRUCTION FROM THE STANDPOINT OF
THE ARCHITECT AND ARCHITECTURAL ENGINEER.

W. J. Miller.

The following paper is devoted to a general examination, from the standpoint of the architect and architectural engineer, of what is commonly known as a Class "A" Building.

It was quite evident to those of us who were here on the 18th, of April, last past, that the so called Class "A" building received at that time its initial baptism in the earthquake wave, with, however, a fire following of sufficient intensity and duration to eliminate nearly all of the ill effects of this infant experience.

In successfully resisting earthquake effect this type of structure has, beyond all question, proven itself of superior merit to any other type that has been employed in this city, and, as far as the author has knowledge, at no other time, nor in no other location has such a severe test of this kind been applied to the high, isolated structures of man.

Claims of equal merit have been advanced by the friends of another type of construction (that of reinforced concrete), but these claims are based on no examples, for in this city there were none.

The Class "A" structure has passed through this severe trial in most—in fact, in all cases where proper intelligent attention had been given to the structural design, practically intact. The integrity thus shown has given us confidence to repeat this type of building, even with the anticipation of future tremblors, although some slight modifications, it is true, should be incorporated.

But while we are swollen with satisfaction that this Class "A" structure passed so bravely through the earthquake (which we did not design it for), what sop is left our pride that it fared so badly in withstanding the fire that we did design it to resist?

Before the fire we spoke of this type of building as a "fire-proof" building, now most of us are content to call it Class "A."

For this failure, however, the architect or architectural engineer should not be condemned altogether, or alone. From an experience extending back to the earlier attempts in building a

fire resisting structure in this city, the author had the satisfaction of noting that, perhaps without exception, the gentlemen in these professions have endeavored to produce the best results possible with the limited means and materials at their command, and by means is meant money.

The owners of the better class of buildings in this city have not been alive to the advantages of a rational expenditure of money for fire protection. Their pockets have been buttoned against the arguments and pleadings of the professional men whom they employed, whose education and training should have enabled them to properly design these structures. And why? There are many reasons. If the survival of "steamer," or collection day, down to the great earthquake and fire can be explained, the same reason will cover nearly all of them. But in addition to this is the fact, gentlemen, that for some reason (the solution of which the author leaves to you), these very owners have not been properly advised as to the insurance benefits to be derived from such expenditure, or reasonable benefits, which should accrue to such investment, have not been allowed. This seems almost an accusation, but it has so frequently been the owner's argument against what seemed common sense in fire-proofing that the author has been forced to recognize it.

Undoubtedly it is to the common benefit of both the owner and the architect, or architectural engineer, for the latter in their design to give the former the best that is in them (if they be permitted), both architecturally and structurally. The limitation imposed, however, in the matter of cost, has in many instances, precluded the architect or engineer from exercising his best judgment, and it may be set down with but little chance of refutation, that had the owners of our so-called "fire-proof" buildings exhibited more confidence in their architects and engineers, and backed up this confidence with the coin of the realm, no such sweeping destruction would have occurred, at any rate, many of our larger buildings would have escaped with but paltry damage and millions of dollars would have been saved.

The type of building under consideration, that with a steel cage skeleton, is dependent upon this frame for its structural integrity. Fundamental then is the correct design of this portion of the structure. This is the function of the architectural or structural engineer, and it is one that not only carries with it a great responsibility, but in addition calls for a wide experience and a skillful handling in the arrangement and use of the materials incorporated in order to produce the most economical re-

sults. To those of us who have spent many years in study, and in familiarizing ourselves with the various processes through which the materials pass before they assume their final condition of fabrication and erection, nothing is stranger to us now than the knowledge that we knew not the "royal road" to engineering excellence.

A great earthquake, and a greater fire, has made structural engineers of many of our architects, not to speak of a nondescript mass of carpenters, concrete workers, iron-mongers and whatnots. They litter up the town with their advertising signs, and will design anything for practically nothing, or will, preferably, wander you off into the uncertain fields of indefinite cost on a percentage basis. For the safety of their structures, may the Lord be with them, for the knowledge of mechanics is not.

A framework of the steel cage type, in order to preserve its strength in permanence, needs protection both from dampness and fire. The greater of these dangers is that of fire. While a steel frame may in time be weakened sufficiently by rust to destroy its usefulness, it succumbs almost immediately, when loaded to its capacity, to a fire of any considerable intensity. A proper protective covering of the steel frame should then combine both of these important qualities, and more particularly the latter.

The foundations, as a rule, being below the basement floor level require no protection from fire, but owing to the prevailing dampness, a greater protection from rust. This is generally accomplished by encasing these members in concrete, and, as a further precaution, coating this concrete with a water proof paint.

The framework above the basement level, however, needs a maximum fire protection.

The degree of fireproofing required depends upon the use to which the individual building is to be subjected. These are varied and many, and while naturally the nature of the fireproofing is similar, each particular condition should be carefully studied and receive separate treatment.

The frame of a building used for the storage of large masses of goods of an inflammable character should receive a maximum protection, while a factory in which non-inflammable materials are fabricated may perhaps call for little or no protection. Personally the author advises the careful fireproofing of all structural steel, no matter what may be the nature of the buildings' occupancy. It is a pennywise and pound-foolish idea to assume that a damaging fire cannot occur. At some time it

may, and it is a far more economic condition to be prepared for it than to replace portions, or perhaps the entire structure.

In most cases the exterior, or architectural envelope, thoroughly encases and protects the exterior portions of the structural frame. Except in structures monumental in character, however, this does not apply to the first or ground story. The utilitarian conditions in the great majority of buildings force the designer to leave more or less exposed the supporting steel members at the first story level on the street fronts. Practically all that can be done is to give such protection as is possible with concrete and a light metal shell, occupying as much space as the show-window mad shopkeeper will permit. Unfortunately this good individual has a position of vantage as he reaches the owner's ear through his pocket. A circuitous route, perchance, but a sure one. This demand for large show window areas has also practically prohibited the structural engineer from carrying the wind bracing down to the first tier level, and, in consequence, the majority of steel frames are faulty in this respect.

In designing the framework no cast iron should be used for structural members, and steel columns of a closed form should obtain if possible. Careful attention should be paid to wind stresses, and if the architectural design will permit, a lattice girder of as great a depth as possible should be used entirely about the exterior of the building at each floor level. The belt courses, cornices and parapet walls should be carried upon and securely anchored to steel supporting members.

While it is quite impossible to intelligently design the structural frame of this type of building to resist earthquake forces, inasmuch as the intensity of the force is unknown, it is yet the belief of the author, that if the steel frame be designed with the necessary bracing to withstand a wind pressure of thirty pounds per square foot for its full height, it will successfully resist the stresses caused by an earthquake of the intensity of that of last April.

Investigation after the fire demonstrated the fact that all materials commonly used for the exterior envelope, whether upon the street or upon the rear or division lines, showed failure in more or less degree. The architectural facades of granite, sandstone and marble, where attacked by heat, spalled badly, while those of pressed brick and terra cotta, although not presenting the appearance of great damage to the casual observer, have in rehabilitation exhibited such serious defects that in most cases their entire removal was necessitated. The outer

inch of these materials chips off with practically no effort. Even the rough brick walls, where exposed, show a similar weakness, but notwithstanding this all brick walls proved effective fire barriers where they contained no openings. The ornamental terra cotta, in particular, developed dangerous cracks not noticeable except on close examination.

Exterior ornamentation is a necessary factor in nearly all buildings of this type, and as this ornament can only be worked out in a satisfactory manner in the materials named, it seems quite beyond the possibility of preserving intact the exterior of such structures in any major conflagration.

All stone facing members, and all walls, should be anchored to the steel frame. The facing members by not less than two anchors to the piece, and the walls by continuous anchors at the floor levels, both top and bottom. Face brick should be bonded at least every fifth course with a special bonding brick eight and one-half inches deep. The ordinary clip bond has thoroughly demonstrated its inadequateness. It would appear that for rear or division walls, where practically no ornamentation is required, a reinforced concrete envelope whose reinforcing members are thoroughly tied to the steel frame would be admirable. The reinforcing rods should be spaced about twelve inches centres in both directions, being suitably increased at openings.

Exterior hazard, on all fronts, should be reduced to a minimum by the use of metal window frames, and metal sashes glazed with wire glass. Sprinkler heads over each window distributing water over the full glass area would render additional service in protecting the wire glass from fusing, but who is with sufficient courage to ask the average owner to do this?

The soffits of all lintel beams or girders, especially where the window head sets up practically against them, should receive careful attention. Care should also be taken to thoroughly anchor the metallic window frames in place.

The protection of the interior structural members is one of great importance. The top and sides of the main floor girders and beams are readily protected by the fairly thick haunch of the concrete floor slabs, or by the skewbacks of either flat or segmental terra cotta arches, but the protection of the soffits of these members should receive more attention. They should be covered with a considerable thickness of concrete, or with a crimped wire mesh, which, due to the crimping, would afford a dead air space after being plastered. In addition the suspended

ceiling should pass under either primary protection mentioned above to afford additional security from exposure to heat.

The author believes that the flat reinforced concrete floor slab demonstrated its superiority to all others during the late fire. It should, however, be protected from below by a suspended ceiling, and should be troweled to a smooth finish above, without a wooden floor with its accompanying sleepers. If desired a linoleum covering may be superimposed. Sockets for the insertion of metallic fastenings, to hold carpets or rugs in place, can be imbedded if such final covering be contemplated.

Terra cotta floor arches failed badly through the spalling off the soffit member by expansion, and concrete floors not protected by suspended ceilings were practically destroyed although remaining in place.

The author also holds that all beams at the first tier level should be protected, including those supporting the sidewalk, and especially those at the building line. The latter support the inner edge of the sidewalk lights, the store fronts, and the first floor, and are particularly endangered on account of the fact that openings through the floor under the show window platforms are left to provide basement ventilation, thereby forming a short though perfect flue action.

The protection of the beams at floor openings, and the beams between adjacent elevator shafts has likewise been slighted, or entirely neglected, owing to the desire for a small slip of additional floor area. This practice is to be condemned, and these beams should, on account of their extreme exposure, be carefully fireproofed.

A well preserved dead air space, in the opinion of the author, is the true solution of a practical fire-proofing, as it offers the only real obstacle to the rapid passage of heat. Structural floor members, and the floors themselves, bear silent witness to this where they were protected by suspended ceilings, and columns also where protection of this type was not broken away or destroyed before the fire.

The length of time that the material forming this air space should preserve its integrity is that during which the attacking fire can harm the structural member, or until it can be subdued or extinguished. All materials were destroyed by fire during the past conflagration, probably more would have been destroyed had there been more water, especially plaster on metal lath. At the best we can only hope to save the structural framework from injury in a fire of any considerable magnitude, and should

thankfully replace any fire retardant that has successfully performed that function.

As the supporting columns of a structure are an exceedingly vital element in the framework, it is to these members that a maximum protection should be afforded.

The author has given this problem careful and extended consideration, and is now employing the following system of column protection which appears to encompass all that experience demands. It protects the steel member from rust and fire, and affords not only a minimum of size, but in addition a minimum of renewal cost should its perishable units be destroyed.

It is recommended that the column be spirally wrapped with wire cable or barbed wire, allowing an advance of about nine inches between adjacent wires in the wrapping. A specially designed "U" shaped concrete retaining clip wire is placed, staggered from side to side, on each alternate wrapping on the column face which presents no re-entrant space behind the wrapping. The entire structural member is then encased in a gravel or fine stone concrete, placed as a wet mixture, covering the extreme metal projection at least three inches. About this is built up a covering of furring tile one and one-half inches in thickness, giving a three-fourth inch tile face and a three-fourth inch dead air space between this tile face and the concrete. This tile is laid flat in cement mortar with broken joints, and is in addition secured in place by two wrappings of annealed steel wire, entirely encircling the column, for each twelve inches in height. These wire wrappings set flush with the surface of the tile, in grooves provided for that purpose, and the twisted ends are thrust back into a mortar joint out of the way. The usual two-coat plaster finish is then applied. Metal wall plugs are inserted at any points where nailing may be required.

While the outer tile envelope of this type of protection might ultimately be destroyed by an excessive fire, the inner concrete core, owing to the dead air space, will remain intact.

During the past conflagration all types of column protection, including hollow tile, double and single stiffened metal lath plastered, and unprotected concrete were destroyed and failed of their purpose. The double lath and plaster protection, which acted fairly well in some instances, would probably have suffered to a greater extent had water been available.

Under no circumstance enclose within the column protection any pipe, conduits, wires, or any other unit foreign to the construction of the column protection proper, and further do not

allow any portion of a partition to become an integral part of a column fire-proofing envelope.

Pipe and conduit shafts, closed at each floor level, if possible, should be provided. The closing of these shafts at all floor levels to prevent flue action is very important. If the installation of additional pipe or conduits is contemplated, capped sleeves can be left in the closures to receive them.

All types of partitions failed. Metal lath and plaster partitions probably served as fire barriers to a greater extent than those of other forms of construction, for while practically destroyed, they remained standing to prevent the spread of flames. The heat of the fire destroyed the mortar of the tile partitions causing failure, and in addition the tile became in the reheating exceedingly brittle. Many lath and plaster partitions were secured to wooden nailing strips at their foot which burning away left the partitions hanging to the suspended ceiling, complete wrecks.

The question of partitions is a hard one to successfully solve. Probably a thin, solid reinforced concrete partition, with vertical reinforcing bars in its center, spaced about twelve inches on centers, and horizontal reinforcing bars staggered on either side of the vertical bars, at intervals of six inches, offers the best solution of the problem. All the reinforcing bars should be thoroughly fastened, the vertical bars to the concrete floors, and the horizontal bars to abutting walls and partitions. In all cases run partitions from floor to floor.

A vast amount of good could be accomplished by establishing partitions at stair and elevator wells merely as fire barriers, with the openings through same protected by metal doors with wire glass, but utilitarian conditions, as a rule, not to speak of a false economy in fireproofing, prevent this installation.

The use of metal trim in the place of wood, is, perhaps, to the average owner one of cost, or the interest on the initial investment alone. If the exterior hazard has been practically eliminated by the use of metal frames and sashes, and wire glass, and the structural portion of the building has been carefully protected, and the spread of fire retarded by the use of metal corridor doors and transoms with wire glass, it is the opinion of the author that the small remaining portion of the interior architectural trim is a matter of some indifference and can be grouped with the perishable furniture. This fact is rendered more plausible by the scant consideration given a metal installation in reduced insurance rates.

The installation of a sprinkler system, with an adequate water supply, is in a measure determined by the use of the building, and the general water damage that may be created by the opening of any individual or group of heads. Such installation reduces the liability of a dangerous fire, and likewise the insurance rates to a minimum, and will, in addition, do away with the necessity of metal trim. It is only a question of making the interest of the initial cost of installation, and the amount of the insurance premium, bear a proper relation to render more prevalent this method of fire protection. The owner can also bear well in mind that a limited area of fire means a reduced period of time for the necessary repairs, and consequently, less loss of rent.

In connection with an adequate water supply, it would be well to consider a building of this type as an isolated unit, and install therein a deep well and pumps with ample tank storage capacity on the roof. The pumps to have an auxiliary motor power in addition to that of electricity or gas, which may be available should these latter fail.

The so-called fire proof pitch or asphalt, felt and gravel roof commonly used on the flat roofs of Class "A" buildings makes a hot and spectacular fire, but as all plastic or water-tight roofings are of this combustible nature it is practically impossible to avoid this condition without considerable expense.

In conclusion it may be stated that any meritorious fire resisting construction cannot be of a cheap or flimsy nature. It is an insurance, and moreover, a type of insurance that pays one hundred cents on the dollar while the fire is burning.

The establishment of a zone within the fire limits in which all buildings are of a fire-resistive, or Class "A" construction, is to be highly recommended, but this condition is unquestionably, in our democratic community, most chimerical.

Possibly a great many points that primarily the author had in view to present have been overlooked in the writing of this paper. Unquestionably many important matters have received but scant attention. All that can be said in explanation or excuse is, that these are busy times for those engaged in the profession of building design, and, as each segregated part of construction is taken up the alarming fact arises that they all present enough varied conditions to call for an extended individual paper. It was a matter of some thought to decide what to incorporate and what to omit. It is also a question of great difficulty to avoid repeating the essence of matter to be encountered

elsewhere, at times practically with the same wording. The conditions presented are of such similar nature that their description and remedy are, in explanation, a mere matter of degree as to what thoroughness the subject is to be explored. If, however, the efforts of the author have added in the least mite to the sum of your knowledge, or developed a desire for a common advancement in the better method of constructing and protecting the Class "A" building, or awakened you to the fact that this latter condition can be sooner accomplished through your recognition of a reciprocal reduction of insurance rates in keeping with the strictly protective investment of the owner, or opened to you the fact that the architect or architectural engineer can more easily obtain from the owner this latter concession through your aid in exhibiting such recognition, he will be fully compensated for such time as he has spent thereon.

Before closing the author desires to present for your careful consideration a matter which, while not strictly within the scope of the paper that you have invited, appears to him as one of such infinite importance, and one from which such great benefits may be derived, if intelligently handled, in improving the class of structures to be erected not only in this city but throughout the country, that he takes the liberty of incorporating it even at the possible expense of making this paper somewhat too long and, perchance, tedious.

With all due respect to the framers of the many old "Building Ordinances," and to those who gave their valued time with such unselfish generosity during the trying times last April and May to the compiling of our "New Building Ordinance," the term Class "A" building is not only incorrect but sadly misleading in a majority of cases.

A building ostensibly complying with the ordinance requirements for Class "A" construction, may in reality, through lack of intelligent structural arrangement or fire protection, be a very inferior structure from any point of observation.

To avoid the grouping of all building of this type into one general class, to the detriment of those of superior construction, it would be suggested that a radical departure be made in the designation of the different types of buildings. Structures should not be primarily grouped by classes, but by types. A type of construction is idiomatic, and dependable in specific segregation on its main structural framework solely. This may be a steel cage, of reinforced concrete, of timber, or one of

the many nondescript, hermaphroditic affairs now verily springing up about us.

Think, speak and write of buildings as Type "A," Type "B," Type "C," etc., etc., and then refer to them according to the merit of their construction and fire-resistive condition, as Class "1," Class "2," Class "3," etc., etc., in their various types.

To illustrate briefly:—A steel cage building, having from an insurance standpoint, a practically perfect arrangement of its structural parts and all and several the many fire-restrictive methods and appliances properly installed and arranged, would be designated as Type "A," Class "1," and as any single or group of standard fire-resistive methods or appliances is omitted, in just such measure would the class of the building descend in the scale, so, that although the type may be still designated as "A," the class may be given as "23," or worse.

A class grading would, of course, be made for all structures, whether of Type "A," Type "B," Type "C," or whatever the specific type may be.

The National Board of Fire Underwriters could undoubtedly, after proper consideration, designate the class number that certain construction, protection and installation would afford a structure, and then a proper reciprocal benefit could be made to accrue to the insuring public in strict proportion to a purely fire-resistive investment. A condition that has not, it is believed, generally obtained.

If an owners' building be designated as Type "A," Class "3," in your insurance rating, owing, let us say, to inadequate column fire protection, it will be a grand incentive to make him correct this error, or false economy in construction or installation, that he may bring his structure into Class "1," in order to reduce the rate of insurance, if he contemplate permanent ownership, or to better enable him to sell the property, if he does not. Your risk is reduced, and, probably, for a comparatively small expenditure the owner eliminates a portion of his insurance premium and betters not only his building and investment, but adds greatly to the security of the community as a whole from an extended conflagration.

The author has promulgated this method of designating the many varied types and classes of buildings because of its evident superiority to the one now in vogue, and he believes that much can be accomplished in adopting this nomenclature in improving the class of structures that are to be erected in this city and elsewhere, at least, it appears worthy of investigation.

(Applause.)

The President: We are certainly indebted to Mr. Miller, for a most valuable paper. I would ask for some discussion on the subject, or, if anyone has any questions to propound to Mr. Miller, I know that he will be glad to answer them.

Mr. Gibbons: Listening to Mr. Miller's paper, and what he said about the Insurance Companies combining to compel the owners to improve their buildings, I could not help but think that perhaps the architects themselves are in a measure to blame, in that they construct such good buildings and such fire-proof buildings that the people do not care to carry much, if any, insurance upon them. I believe that Claus Spreckels' Building had \$45,000 insurance upon it, the Crocker Building something like \$25,000, and the Fairmont Hotel about \$100,000—and so on down the line. So the Fire Insurance Companies really do not cut so very much figure when it comes to the premium charged on those Class "A" structures.

There is one question I would like to ask Mr. Miller, and that is in relation to reinforced concrete buildings. I believe that in the spans there are rods placed in the concrete that are hung on hangers. Is that not so?

Mr. Miller: You have asked quite an elaborate question. The reinforced concrete beams are—

Mr. Gibbons (interrupting): Pardon me, I think perhaps I did not make myself clear. I am speaking of the walls.

Mr. Miller: The vertical and horizontal reinforcements in the walls of reinforced concrete are attached to the vertical column members in the wall and to the lintel, or beam edges at the floor levels in the floor. Then they should be linked together at their points of crossing. They are not hung on hangers, if I understood that to be your question,—I did not quite understand you.

Mr. Gibbons: I saw them building a reinforced concrete building here, and on the sides there were some "U" shaped steel rods, and at the bottom of the U or trough were hooks on some of them at the end, and then there were these long rods running along, and as I thought hanging in them.

Mr. Miller: The horizontal rods in the bottom of the trough take the tension of the structural member. The vertical

member that you speak of, which is a much smaller section of the U shape, are generally used as suspensories for the rod in the tension flange of the beam, and are what are termed shear rods. They are supposed to take the shear resulting from portions of the beam attempting to pass each other, and carry it to the top of the beam, and it is extended until it is carried to the abutment. As to how that works in a vertical rod, I am free to confess that I do not see its true application. The rod, in my opinion, should be placed at an angle.

Mr. Gibbons: What I wanted to ask was this: These U-shaped rods seem to come right at the bottom of the beam, in which case they would be exposed to fire, would they not?

Mr. Miller: Yes.

Mr. Gibbons: And is it expected that those are to be covered?

Mr. Miller: In a reinforced concrete building, while the layman looks at it as a fireproof structure, those who are the closest friends to the reinforced concrete building are free to acknowledge that a reinforced concrete building requires as much fireproofing to preserve its structural members, which are the members you speak of, as any other type of building among steel buildings. Those members that you speak of should be encased entirely, having in my opinion, a dead-air space in addition to the simple idea of covering. Otherwise, they are not fireproof, any more than any other type of construction.

Mr. Gibbons: Can you have an air space? Is it possible to make an air space in those solid walls?

Mr. Miller: The only method of dealing with that question in reinforced concrete is a dove-tailed arrangement, where the concrete is poured into it, and holds the tile in place. In case of fire, the tile is burned off and can be replaced. It is absolutely essential to have that dove-tailed arrangement, in order to accomplish that. As a general rule, it may be stated without any possibility of dissent, that a reinforced concrete building, in order to protect it, must be fireproofed as much as a steel building.

The President: I observe that Mr. Miller spoke, in one part of his paper, on the damage shown by external walls, even

when they were of brick and terra cotta. It occurs to me simply as a matter of curiosity, to ask whether, in his opinion, it was feasible at the time of the fire to discover how much of the damage was fire damage, and how much was caused by the shaking which these external walls must have received in the vibration of the building itself.

Mr. Miller: I will state in reply to that question, Mr. President, that in company with eight or ten members of the Structural Association, and the Members of the American Society of Civil Engineers, our Local Chapter, we visited on one or two Sundays some thirty or forty buildings, going up into them, and this was directly after the fire, before any rehabilitation has been done—in fact, while we were waiting for the Insurance people to allow us to go to work—you see I can't help but get back at you once in a while. In the Mills Building, in particular, which has a front of terra cotta and Roman brick, the windows were surrounded entirely with terra cotta work. On close examination, we found it was not an earthquake damage in that building, but was purely a fire damage. It was a case of the fire heating those members, and they attempted to expand and could not do so, and so they cracked. I think practically all the terra cotta in that building which surrounded the windows was absolutely destroyed by fire. The terra cotta work in the Merchants Exchange Building suffered the same damage. Wherever fire burst through the windows with any intensity at all, it destroyed the terra cotta members. This was particularly the case in the Bullock & Jones Building, on Sutter street, corner of Trinity. That was the first building constructed in this city of the true Chicago type, very large window openings, and small engagements of the columns and lintels, taking up as little room as possible, and the windows placed low. The exterior covering of that building was absolutely destroyed by fire. I went down the morning of the earthquake about six o'clock to look at the buildings, and I remember that particularly. I found that the earthquake had not damaged it in the slightest, that there were no cracks in the terra cotta, and no windows apparently injured. After the fire it was an absolute wreck, and all of the terra cotta outside work had to be removed. In the interior portions of the building, where there

was any amount of combustible material, we found that the first inch of the common, ordinary brick was so heated that you could scale it off with practically a small stick, and it didn't require any effort at all. All of that will have to come off, of course.

Mr. Mendell: I would like to inquire whether, in this market, there is any test made of the cement, as to its tensile strength, and not only that, but as to its fineness.

Mr. Miller: They should test all cement, particularly that to be used in reinforced buildings, not only for the pulling strength in direction, and the swelling and hot and cold tests, but they should also test it chemically.

Mr. Mendell: I was looking through some old papers of my father some years ago. I was very much interested in an account of some fortifications that the United States Government built out here, and this was a report from the War Department in regard to an arsenal in New York State, at Fort Terry, I believe, where there was a very large amount of money expended, and it was supposed to be built as strong as it could be built. To the utter consternation of the Government officers, the reinforcement commenced to fall off, and the steel frame to sink, so much so that they had to take the frame down. They then investigated the construction very carefully, thinking that perhaps the steel construction was at fault. They fully exonerated the steel contractors, however, and then investigated the question of cement, and they found that the cement that had been used in the construction of this building was not from natural deposits of rock, but had been made from the slag of a glass works. The orders from the War Department now are that all cement must be tested for its tensile strength, and must also be tested as to its component parts. And it is absolutely forbidden to use any cement in the constructions of buildings for the Government wherein slag from any glass works is used.

Mr. Miller: There is made by one of the Steel Companies in the East what they call a slag cement, which is made in the manner you speak of. I will state that the component parts of good cement are practically the same. Cement is an artificial condition or creation. If you have the necessary lime stone

and clay, and the proper methods of manufacture, you can make cement anywhere. It is only a chemical combination, and of course it should be a proper chemical combination in order to have a proper tensile strength, and test out properly in the other respects suggested.

Mr. Mendell: This was made with a metallic base, and it was further stated in the report that the cement was full of sulphides.

Mr. Miller: There are different kinds of cement, and there is good cement, and there is poor cement. Probably the cement in question simply came under the latter head. Cement is properly made at all times with the same formula, and it is only a question of the care used in its manufacture whether it is good or bad.

I want to say one thing, gentlemen, that I did not say in my paper, and I think it would be a great assistance, not only to those of you who are installing this class of buildings, but when you sometimes have a little influence with those who are installing them, if you could aid the engineer in one way. Perhaps you do not realize the difficulties we contend with in dealing with the owner. He has his eye upon one thing he wants the maximum income from a minimum expenditure. I have never seen any class of men so inoculated with a disease as are the owners of this class of building with the desire to secure the maximum income from a minimum expenditure. Consequently we have to urge them all the time to do what really should be done in the construction of those buildings. The term "Class 'A' Building" is entirely wrong, with all due respect to the so-called fire ordinance. They framed that ordinance in a hurry. The term should not be "Class 'A.'" The buildings should be segregated into types, 1, 2, 3 and 4; or A, B, C and D, as you choose. Then you could place your steel frame building as Type 1, your reinforced concrete building as Type 2, your building with brick walls and steel members resting on them with concrete floors as Type 3, and so on down the line. Then you should take your different types, and classify them according to the amount of protection, we will say the amount of fire protection so far as the Underwriters are concerned. A building of Type 1, which is thoroughly protected,

which has in its construction everything that science and experience has given us as best to protect the structural frame and contents from fire, including metal door and window frames and wire glass, and proper protection of the structural members, might be called Class A of Type 1. Where you have left out your metal glass and your metal door and window frames, you might call it Class B, of Type 1. Where the columns are not properly protected, you might call that Class C, of Type 1. You probably could get fifty different descriptions, according to the protection, in Type 1 alone. If you would use this system of classifying these buildings, dividing them into types, and the types into classes, it would make it very much easier for us to handle the owner. The owner might want a Type 1 building, Class A, or a Type 2 building, Class A, and to put it into the vernacular, we could jolly him on into using the better type and class. It would help us in a great many ways, and it is a suggestion that I seriously offer to you. Upon your side, it will permit you to rate your buildings easily, and it certainly will encourage the owner to build a better building. I think it is a matter that is well worth your consideration.

The President: I think Mr. Miller's suggestions are very practical. If there are no further remarks upon the subject of Mr. Miller's paper, we will take up No. 9 on the program, a paper by Mr. W. P. Abel. I have had several talks with Mr. Abel, who has been in the city for some months. He took a great deal of interest in our Insurance Institute, and, at my suggestion, he has written out a little sketch of the operation of the Institute in Norwich, where they have had about fifteen years experience in Institute work. I am going to ask Mr. Fuller to read this little report of Mr. Abel on the subject of "The Norwich Institute," and the work of that Institute.

Mr. Fuller: I am very glad indeed that the President has asked me to read this paper, for the reason, that, with his permission, it will give me an opportunity to say a little something about our own Institute. You are all familiar with the difficulties under which we labored for years to bring about the organization of this Institute, and you are all quite familiar, too, with the success which was attained during the brief period of its existence. Of course you still further know that the disaster

of April 18th last interfered with the work of the Institute. But, now that matters are being cleared somewhat, it is to be hoped that an effort will be made to have a session during the present year. Our Librarian has gotten together quite a nucleus for a new library in the way of books, and something should be done to keep the Institute going. In my address before the Twenty-fourth Annual Meeting, I made reference to the office staff of one insurance company that made up the active working force of one of the Institutes of the Federation of Institutes of Great Britain and Ireland. That was the Norwich Union Office. And as Mr. Abel, who is an officer of that company, has given us something in the way of information regarding the workings of that Institute, I am very glad indeed to read to you what he has to say on the subject.

THE NORWICH INSTITUTE.

W. P. Abel.

This was established some fifteen years ago and so far has had a successful career. It originated with the Norwich Union Fire Office, but the Institute is open to all connected with the insurance business in the city of Norwich.

The principal officers are the president and vice-presidents, the latter consisting of the chief officials of the Norwich Union Fire Office and branch managers all over the globe.

The members are divided into Associate and Active members, the distinction being chiefly in a higher annual subscription from the former, and consequently they consist of the elderly or more advanced of the employees.

The meetings are held of an evening at the Norwich Union Fire Office, whose directors were pleased to place the office premises at the members' disposal for such purpose.

Papers are read during the winter session by various gentlemen of experience in certain lines of insurance business and risks. Many of these gentlemen make a special journey to Norwich for that purpose. Of course in a general way the papers treat of fire insurance matters, for example, a paper is read on "Woolen and Worsted Mills," another on "Corn Mills" and another on "Potteries," and all the machinery and special hazards in connection with these risks are explained and shown usually by lan-

tern. The gentleman reading the paper is one who is particularly conversant with the subject and resident in the district where the respective risk is common to it.

There are, however, other papers read, for instance, on chemistry, electricity, explosives and such like. Some of these (referring to all the above) are published in the Annual Proceedings of the Institute.

The opening meeting of the winter session is always in the form of a convivial gathering and the proceedings, after the annual arrangements are concluded, consist of music by the Norwich Union Fire Office band (of about twenty) and songs given by some of the musical members of the office staff.

At each and every meeting an interval takes place for light refreshments, when coffee, tea and aerated waters are served and smoking permitted for the last half of the evening.

In connection with this Institute the directors built a museum in which is to be found today many objects of special and peculiar interest to fire insurance people. One can see there specimens of the processes of manufacture of many articles (of every day use) from the outset to the finish. A large collection of curiosities in connection with causes of fires are also to be found in this museum, as well as specimens of products and goods from all parts of the world contributed chiefly by Norwich Union representatives.

There is also a library attached to the Institute which comprises many standard works on insurance matters, presentations to this library are continually being made by prominent gentlemen connected with the Norwich Union Fire Office.

During the year prizes of money are given to the best papers on a given subject written by any member of the Institute. So far there has always been found candidates for these prizes, but in a general way the number has never exceeded, say six to eight.

In order to keep the Institute before the members during the summer months, an annual outing takes place at the cost of the institute. The members go either by rail or carriage (according to distance of destination) to some interesting point and it is arranged beforehand that a good meal is provided for the party at some suitable hotel. This is followed by a musical evening.

There are several Insurance Institutes in principal centers of England, for instance, Manchester, Birmingham, etc., but I believe so far that one has never been successfully launched in London. The difficulty there is the distance of the respective

homes of the employes from any given point. This is probably a difficulty that might be found to exist in such a place as San Francisco with its many outlying towns.

Not having any data here I can only give this rough sketch from memory. I should say the Institute is comprised of about one hundred members (active and associate) of some 250 to 300 Fire, Life and Accident employes in the city of Norwich, of which say one hundred and fifty are fire, and these are principally the members.

(Applause.)

The President: Mr. Abel's description is especially interesting in view of the desire of the Association to go on with the Institute work this coming year. There are no doubt, suggestions therein that will be of value to us.

We will now listen to a paper entitled, "Some Lessons from the Conflagration," by Mr. Frank J. Devlin. I have the pleasure of calling on Mr. Devlin.

Mr. Devlin: Mr. President, and gentlemen: I want to say by way of apology that I have had very little time to prepare a paper. The interruptions have been many. And if my conclusions are abrupt, and especially if my closing shall seem abrupt, I hope you will overlook it.

SOME LESSONS OF THE CONFLAGRATION—AND A PROPHECY.

Frank J. Devlin.

I have been asked by your Honorable President to express my views as to the possible lessons taught by the late conflagration in San Francisco, and at the same time he has kindly given me permission to depart from the immediate subject, and present any thoughts I may have upon insurance matters in general. This slight sketch has been hastily made, as I have had neither time nor opportunity to present to you a technical paper.

From our late experience we now know that earthquakes of any intensity are apt to cause fires by the short circuiting of electric wires, the over-turning of stoves and lamps, and the demolition of brick chimneys, thereby permitting the fire in the flues to attack the sides and roofs of buildings—from all of which causes a general conflagration may easily arise. San Francisco's greatest cause for thankfulness was that our earth-

quake occurred at an early hour in the morning when the business and household world were asleep; otherwise the damage would have been far greater.

An earthquake is a hazard that companies have not heretofore in this country taken cognizance of, although in all other countries, I am informed, it is taken into account, and the companies avoid liability by the insertion of an earthquake clause in their policies, which the insured readily accept. Leaving all personal feeling out of the question, and taking into consideration the late prevalence of earthquake shocks, not only in this country but throughout the world, this seems to me a legitimate safeguard for insurance wherever it may be transacted.

Insurance companies should not be called upon again to meet such enormous drains upon their reserves, where a conflagration arises from a source or hazard not contemplated by them nor the insured at the time the policy was issued.

While confronted with the loss and suffering that the victims of such disasters must endure, one should not lose sight of the fact that fire insurance companies are largely public benefactors, and, therefore, nothing should be exacted from them that would reduce the security of their other policy holders throughout the world; nor should anything be done that would deprive their stockholders of a legitimate return for the risk they have assumed. If there are insurance companies willing to assume such an unusual hazard as an earthquake, they may possibly protect themselves by an additional rate, but companies that do not wish to assume it, should not be compelled by law to do so. The law, however, should protect policy holders by compelling insurance companies to print boldly in red ink on the face of the policy, any clause or exception that is not found in the ordinary policy issued; or, if found practicable, the suggestion made by the late Governor of California in his message to the Legislature might be adopted, namely, that all such exceptions should be signed by the insured.

The earthquake might have come and gone, and the fire raged furiously and yet the fire might have been controlled if there had been water. Therefore, the water supply of every city should be safeguarded against earthquake or other inimical force of nature. Communities should be penalized by an increased rate if they do not insist and compel corporations to which they have granted franchises to do this work in the most approved and scientific manner. Pipes laid on marshy ground without proper protection and wooden flumes carried along by trestles are not

proper methods for conveying the water supply to a city. The destruction of San Francisco is largely due to the inadequate protection afforded by its main pipe lines.

In the report of the President of the Spring Valley Water Company, it is stated that there was a complete destruction of the Pilarcitos pipe line with a capacity of 10,000,000,000 gallons a day; extensive breaks in the Crystal Spring 44-inch conduit at the crossing of Baden Marsh; a break in the San Andreas conduit at the crossing of Baden Marsh, and damage to the city's distributing system, and loss of service connection throughout the burned district, with some slight damage to Lake Honda reservoir. Has a lesson been learned? Will these defects be remedied, or will the Water Company be allowed to go on as before, regardless of the danger that is imminent? Municipalities can compel this work to be done, and where it is not done, a heavy charge in the rate should be made against the property insured in such municipalities. Where the people of a community will not protect themselves, when they have the power to do so, they should be forced by the imposition of heavy penalties upon them.

I believe in lessening the rate by remedying the defective systems, rather than by allowing them to exist, and charging the additional rate. The community should be taken into our confidence. Every policy holder should be shown how rates are made. Inform him that the city or town in which his property is located can lessen the rate by making improvements in its water supply, its fire department, and by enforcing its building laws and regulations. Also show to him that he can reduce the rate on his own individual risk by remedying the hazards or deficiencies charged against the risk; that he is practically the arbiter of his own rate. As it is now, the insured believes that all rates are arbitrary. Explain to him how the insurance company is endeavoring to protect him, not only against his enemy—fire—but against his own ignorance. I hope the time will soon come when a schedule plainly and simply showing how the rate is made will accompany every policy. Make the policy holder feel that there is no dark, deep mystery about the insurance business; that it courts publicity, which, by the way, is the best antidote for criticism.

All large cities lying near waterways should have an auxiliary water supply to be used in fighting fire, and cities so situated, and not providing this supply, should be taxed in the rate accordingly. The auxiliary system was strongly urged by the late Chief Sullivan with penetrating foresight as to what might

happen to San Francisco, and had his suggestions been adopted the community and the insurance companies would have been saved, not millions, but perhaps hundreds of millions of dollars.

In addition to this auxiliary water supply, a sufficient quantity of dynamite or other high explosives should be kept by the fire department in some place, not dangerous to life or property, but close enough to water or rail to be easily and quickly secured in the event of a conflagration. The fire department should have a body of men trained in the use of high explosives, to be used only in the case of dire necessity. A record of every building destroyed should be faithfully kept.

An auxiliary corps should be connected with the fire departments of large cities, and these men should be ready to respond to any emergency call. It is too much to expect of a man to work day and night, and but little good he is to fight fire when exhausted. This auxiliary corps might be paid a yearly stipend, and could train on Sundays or holidays with the regulars. In case of an extended conflagration, where the men are on duty for long hours, they should be provided with hot drinks and food. This would be much better than alcohol, which men will take when physically exhausted.

I might go on indefinitely, but I have simply taken up some of the points that seem most important to me, and the lessons that I have been taught by this fire. Eternal vigilance is the price of security against conflagrations, and the sooner municipalities and their citizens recognize this, the better it will be for all. Politics and selfish personal interests retard progress, and if the fire waste in our cities is to be controlled, the people must see that honest men, who will devote study and labor to a city's needs and protection, are placed in control of municipal affairs.

If the members of this Association have not read the report of Professor A. W. Whitney of the University of California, who was chosen by the Chamber of Commerce to gather statistics in connection with the adjustment of losses, they should do so. Some may charge Mr. Whitney with being a theorist, and say his suggestions are not practical. I do not agree with them in this. He has given his time and study in an endeavor to enlighten those who are ignorant of insurance affairs. He comes as an unprejudiced man trying to pave the way for better things in our business. It is right that those who teach should be in the lead of thought, and that they should always be a little ahead of the mass. What is more true than the following:

"In spite of the fact that fire insurance is usually a private

enterprise, there is no more fundamental fact than that the companies should stand simply as agents of the insured. That is, instead of the companies insuring its policy holders, the policy holders really insure each other, and the company simply manage the details of the transaction. In insurance there are no values created, they are only distributed, and whatever the company distributes must be collected."

If the public understood this, how little drastic legislation would be placed upon our statute books, and how much more might the insured and the insurer dwell in harmony together! How few of the companies would have failed, or have paid but fifty cents on the dollar, if his ideas had been carried out with reference to limiting the amount that a company should be allowed to carry in a city or district, subject to a conflagration hazard! Well managed companies always limit their holdings in proportion to their reserves. Why, therefore, should not other companies not equally as careful be restricted by law, if they do not do it voluntarily? Some States will not permit companies to carry on an individual risk more than a certain percentage of its net surplus. If applied to the individual risk, why not apply it to a city or district subject to a conflagration? How this limit should be arrived at, is a matter of detail. Make it as liberal as you please, but make it so that the public will not lose—more than that, make it so that the companies may not suffer through their own greed.

Whether the Municipalities and States will intelligently take up these questions and others vital to the people of the country, I do not know; but if the States do not do their part, or fail in the performance of their duty, I prophesy that the people will call upon the National Government to assist them.

In the nature of things, it is hardly possible for the average State Legislator to make laws governing insurance companies without being possessed of much technical knowledge as to the manner in which companies conduct their business. The information he gains usually comes through the press, and how one-sided and misleading this generally is. He does not realize the heavy taxes and burdens that are now imposed on insurance companies, nor the small actual profit that is made by them on their underwriting account—nor does he know that the surplus of a fire insurance company, which he looks upon with misgivings—is practically a fund to meet conflagrations as they arise, and that this fund may be depleted at any time; that this surplus, when reduced, must be replenished largely through the

rate. It is for the want of this knowledge that a multiplicity of laws—and of infinite variety—are adopted in the several States, and yet the contract issued by the insurance companies is practically the same in all of the States. There is, therefore, a crying need for uniformity and a radical change of laws in the States, for there are few, if any, with a code of laws that may even be termed satisfactory.

Federal supervision would accomplish this, and no valid objection has been offered against it. There are many arguments in its favor, but I can do no better than to quote from an article by S. Huebner, Ph. D., Instructor in Insurance and Commerce, University of Pennsylvania, viz:

1. That national supervision will greatly lessen the unnecessarily large cost of supervising insurance companies by fifty-two separate State and Territorial departments, and that by thus lessening the expense it will decrease the cost of insurance.

2. That it will obviate much of the burdensome and discriminatory taxation now imposed by the several States upon insurance companies of other States.

3. That it is the only means of remedying the present lack of uniformity in our State insurance laws; that it will be a step toward uniform regulation and supervision of insurance companies; and that it will afford relief from the many petty exactions imposed by the different State departments, as well as from the evils resulting from variations in the rulings of the several insurance commissioners.

4. That it will afford better protection to policy holders, and will result in the elimination of fraudulent insurance enterprises.

5. That it will entitle any insurance company reporting to the National Government to transact business in all parts of the Union, at the same time protecting that company against the retaliatory legislation of other States.

6. That foreign countries would regard with much more weight the certificates issued by a National department, and that the Federal authorities would be in a much better position both to protect American companies transacting business abroad and to supervise the large number of foreign companies transacting business in the United States.

7. That centralized supervision by trained experts would enable the National Government at small expense to provide for a much greater degree of publicity as regards this most important business than is possible at the present time. Information regarding the principles, operation and condition of the business

could be disseminated throughout the country in clear and concise form as contrasted with the confusing, voluminous and often meaningless mass of statistics issued from time to time by many of the State insurance departments.

8. That insurance is both in theory and in practice a National and International business, and not a fit subject for State or local control.

These arguments seem to me unanswerable.

On December 8, 1904, the President of the United States, in his annual message to Congress, said:

"The business of insurance vitally affects the great mass of the people of the United States, and is National and not local in its application. It involves a multitude of transactions among the people of the different States, and between American companies and foreign Governments. I urge that Congress carefully consider whether the power of the Bureau of Corporations cannot constitutionally be extended to cover interstate transactions in insurance."

I am quite aware that the Supreme Court of the United States has decided that insurance is not commerce, but it is believed that it has—in part at least—receded from that position in subsequent decisions; besides, none of the cases in which a decision was rendered involved the constitutionality of a Federal law. If Congress should pass a law providing for National supervision of insurance, the question would then come direct before the Supreme Court, and it is believed, with the arguments that would be presented, the Court might reverse its former opinion, and declare insurance to be commerce—otherwise, in view of the advantages to be derived from National supervision, an amendment to the Constitution would be justified.

In conclusion I beg to say that I have become a firm believer in Federal supervision of insurance, and I hope the day is not far distant when it will supersede State supervision. It will not only benefit the people, but will be welcomed by all honorable insurance companies.

(Applause.)

The President: Are there any remarks, gentlemen, upon the subject matter of Mr. Devlin's very able paper? It suggests itself to me that we should hope that in the possibility of Federal control, we would not get both Federal and State control.

Mr. Devlin: No, we don't want that, surely.

The President: Mr. W. B. Honeyman has asked the privilege of the floor, gentlemen. I believe he has a communication to make. If there is no objection, we shall be glad to hear from Mr. Honeyman.

Mr. Honeyman: Mr. President and Gentlemen: I have jotted down in a casual way some observations that I have made in the process of settling losses in the North. I had made mention of these facts, and in so doing, I got myself into a job that I did not anticipate, in that I was requested to present my remarks in the form of a paper to be read before your body. Having but a limited time, and not having laid the groundwork of any extended remarks, I will read to you for your information what I have jotted down, as I said before. It applies more especially to the hazard that accompanies electrical machinery, in particular where there are difficulties which could be in a great measure prevented with very little expense.

NOTES ON LESSENING THE FIRE HAZARD.

Wm. B. Honeyman.

The writer having observed the large percentage of preventable damage sustained by electric motors and dynamos in partial loss fires, and having noted the almost universal lack of housing such machinery with any adequate covering to guard against even water damage, wishes to call attention to a provision, which at small expense if adopted, would surely lessen the hazard to a very great extent, namely the encasing of motors in an asbestos lined sheet-iron or steel covering, which should cover the motor or dynamo inside the pulley or pulleys of the armature. Such covering should be made water tight and the top hinged, to give easy access for cleaning and oiling. I have been on many losses where such a covering would have fully secured the machine against any material damage.

The custom now in vogue, where any pretense to house a machine is made, is to put a wooden hood or box over the top of the machine and leave the sides open nearly the full diameter of the armature, which in fact makes a reservoir for water to damage the lower fields, and furnishes fuel for a fire, which is almost certain to destroy the insulation and make a rewinding necessary. And such a covering serves only in a limited degree as a protection from dust, while it was a metallic water

tight casing, it would be a perfect protector from dust and water, and in many instances a good fire shield.

Another feature which calls for improvement, is the location of motors which in many cases are shoved off in a corner surrounded by combustible materials or placed on a shelf or balcony exposed to intense heat from the burning of the same. Of course, the location many times is necessarily determined by the location of the machinery to be driven, but quite frequently they could be much more advantageously located from an insurer's standpoint and lessen the hazard very materially.

Another matter to which I wish to call attention is the necessity of Inspectors on sprinkled risks insisting upon the stops on the heads being cleaned off periodically, as paint, white-wash, cobwebs and dust lodging thereon, prevents the heat fusing the stops. This applies to all sprinkled risks, but more particularly to wood working plants—grist mills, rope works, and others where much dust is made.

The inspection of all steam using plants, steamboats and dredges is another class of risks which calls for more critical scrutiny, especially around the smoke-stack britchen, and ash-pans, which are most frequently the places where fires occur.

In the course of settling losses by fire recently, I have found several instances of faulty construction, where the wood-work was but three to four inches from the stack or smoke-box, and in each case the stack frequently became nearly red hot. In each case, attention was called to the necessity of changes to insure at least an eight-inch air space and the wood-work to be protected by sheathing with iron.

The President: I am obliged to Mr. Honeyman for his very practical suggestions.

The Secretary: Mr. President, I have listened to what Mr. Honeyman has to say with much pleasure, because it comes within the line of my work in a great many cases. It is full of good meat. I move that his paper be incorporated into our Annual proceedings.

The motion was duly seconded and unanimously passed.

The President: That completes the papers, gentlemen, and as we shall have ample time to conclude our labors this afternoon, if there is no objection I will at this point declare a recess until 2 o'clock this afternoon.

AFTERNOON SESSION.

The President—Gentlemen, the meeting will please come to order. I would like to make one further announcement with reference to the membership of the Association. There were a number of gentlemen elected members last year. All record of their election has been lost. Therefore, we are not certain as to just who the newly elected members were, and it is particularly desired that they report their names to the Secretary. Moreover, any person who proposed anyone for membership last year will kindly report to the Secretary the names proposed, and if they were elected, this may help out in building up the membership roll of the Association.

The Secretary—If I recollect aright, Mr. President, eighteen new members were elected last year, and I have no record of them at all, and can definitely remember only one.

The President—This morning's session finished the papers on the regular program. For a great many years past, at the conclusion of the reading of the papers, we were wont to listen to "The Knapsack." Mr. Grant is no longer with us. Mr. Niles, his associate in the editorship of The Knapsack, has no heart to read it, and I am very sure that none of us have any heart to hear it read. Therefore, The Knapsack has been omitted from the program this year as a mark of respect to Mr. Grant.

The next in regular order is the reports of committees. The first committee on the list to report is the committee on the Report of the Executive Committee and President's Address. I will call upon Mr. Fuller, the Chairman of that committee, for his report.

Mr. Kinne—There is a matter, Mr. President, that I think it would be advisable to bring to the attention of the members here, because we are certainly all interested in matters that concern the welfare of Insurance fraternity in general. Has any allusion been made to the form of policy that our Insurance

Commissioner proposes to advocate before the State Legislature, or any of the conditions that he proposes to put in that form?

The President—No allusion has been made to that in this Association, Colonel Kinne, and for what I have thought a good reason. The Committee on Legislation for the Board of Underwriters has watched that matter very carefully, and is still watching it in the Legislature, and it seems to me it would be unwise for this body to publicly advocate any special measure, with reference to a standard policy which might in any way embarrass the committee at just this time. If, for example, the Committee before the Legislature were advocating some particular form of policy, it would be unwise for us, I think, in this body, to discuss other forms of policy just at this moment. It so happens that the meeting of this Association occurs at just a time when I do not think that could be very well discussed before this body.

Mr. Kinne—You are quite correct in that. But, as our proceedings will not be published until after the Legislature adjourns, I thought there might be no harm in calling the attention of the members that are here to the matter, because they all have an influence, they are all acquainted with one or more of the Legislators in Sacramento, and I only desire to refer to the introduction of one particular feature in his form of policy that he purposes introducing a bill to cover, and if it is though inadvisable to have it taken down, the whole matter can be expunged from the proceedings. But I think we certainly should do everything we can to defeat that ridiculous clause wherein he proposes, as I read in the papers, to have it a condition that an appraiser appointed can only serve once in twelve months, can only act in that capacity once a year, which would really result in causing incompetent men to be selected as appraisers. It is more than ridiculous; it is against all practical ideas of conducting an appraisal as an honest arbitration. So it seems to me that there would be no impropriety in telling any Legislator that we meet what we think of it. I do not mean to suggest that we pass any resolution, or anything of that kind, but I thought that some of you might not have read the proposed form of policy, and seen that condition that he proposes to put in the standard policy for the State of California, and it would

be well that you should know it. You can all readily see the effect of such a proposition. The mere suggestion of it is sufficient. Take the case of a man like Alec. Neilson; he is sent out upon a particular appraisalment on a quartz mill, and then for the next twelve months he cannot undertake to do any other appraisalment for any Insurance Company, if a similar loss should occur. It is nonsensical. We may have an influence, each of us, which will change the ideas of some of those at Sacramento who are not familiar with just what that would mean, against such a proposition as that. I have just made these remarks to bring the matter to the attention of the Association.

The President—I think Colonel Kinne's remarks are very timely, and that a great deal of influence can be exerted by the individual members of this Association in the direction of the point of which he speaks, as well as in other directions in connection with a policy form. What we want is a better understanding of the business by the general public of policy conditions, and everything else connected with fire insurance. And I think by the individual efforts of the members of this Association, and the Agency corps, that can be done.

Now we will listen to Mr. Fuller.

Mr. Fuller—Which report will you have first, Mr. President?

The President—The report on the Report of the Executive Committee.

COMMITTEE REPORT.

Mr. President and Gentlemen of the Association:

Your committee to whom was referred the Report of the Executive Committee, beg to report as follows:

I

NOMINATING COMMITTEE.

We believe that the interests of the Association would be best served by the election by the Association of a Nominating Committee to consist of five Past Presidents, whose duties should be to nominate for election at the next annual meeting and thereafter the officers of the Association. Should this recom-

mendation be approved, a formal amendment to the Constitution, in furtherance therewith, may be submitted by the Executive Committee at the next annual meeting.

II.

LIBRARY.

We endorse the recommendation of the Executive Committee that the moneys obtained from insurance on the library be set aside as a fund for its restoration.

III.

DUES.

We urge upon the members the necessity of prompt payment of dues in order that the Association may be able to carry on its work without delay or embarrassment. As a relief to the burdens of the Secretary, out of town members among the special agents are urged to arrange with their officers to pay their dues regularly upon call of the Secretary.

IV.

MEMBERSHIP.

We further urge that every effort be made, not only to maintain, but to increase the membership of the Association, both active and associate.

V.

PROCEEDINGS.

We recommend that the papers presented at the preceding annual meeting be printed in the usual form, separate from the proceedings of 1907, and that the Executive Committee be authorized to include in same a brief account of the disaster of April 18, 1906.

Respectfully submitted,

J. L. FULLER,
HERBERT FOLGER,
JOHN W. GUNN,

Committee.

The President—I understand, Mr. Fuller, that you have made separate reports?

Mr. Fuller—Yes.

The President—Then I think we had better dispose of the report just read before we proceed with the other one.

Mr. Kinne—I move that the report be received and adopted, with its recommendations.

Mr. Gunn seconded the motion, and the motion carried unanimously.

The President—I understand that it will be necessary that the recommendation in the first paragraph be brought up at the next annual meeting. Unless the Committee are prepared to submit at this meeting the proper wording for such an amendment to the Constitution, that will have to go over to the next meeting, since the Constitution provides that any amendment must be submitted at a regular meeting held prior to its adoption, and in order that this may be adopted at the next annual meeting, it would be necessary that a properly worded amendment be submitted at this meeting. I would like to ask the Committee if they have the amendment so drawn that it can be submitted at this meeting. If not, it will go over until the next meeting.

Mr. Gunn—We discussed that last night with Mr. Folger, and I think he dictated that paragraph, and we thought the amendment could be passed next year. What is the reading of it exactly?

The President—Will Mr. Fuller kindly read the paragraph? Just read the recommendation, and let us see whether that can be considered as an amendment to the Constitution, a proposed amendment.

(Mr. Fuller read the first paragraph of the report, as requested.)

The President—I think we can take that as notice that such an amendment will be submitted at the next meeting for adoption. The Executive Committee will therefore prepare an amendment embodying the recommendation, to be voted upon at the next annual meeting of the Association.

Mr. G. D. Dornin—In view of the fact that we have such a very small attendance at this meeting, and this is an important subject, it seems to me that a solution of the matter can be

reached by having a sort of referendum in the matter. Let the recommendation of the committee be submitted in circular form to each of the members, with the request to each member to return his approval or disapproval to the Secretary, and then if it is found that a sufficient majority has been given the amendment, let it be promulgated as the act of the Association, to take effect immediately, and be at once put into operation.

The Secretary—Mr. President, as all the records and data of the Society have been burned, I have only the addresses of those few who are here, and it would be an impossibility for me to send out circulars to all of the members. I would like to have Mr. Dornin withdraw his motion, because I think it would be impossible to get the amendment in proper form and reach the membership.

Mr. Kinne—There is a further point that this is not being adopted now. When we are here next year, this will go into the record. It is now merely notice that such a matter will be presented by way of an amendment to the Constitution a year from today. Those who are present at the next meeting, and have an understanding of the matter, it seems to me would understand a great deal more about it than if we merely send out a circular to the members now.

Mr. Dornin—I understand that it is desired to have this Nominating Committee so organized that at its next meeting it will be prepared to come in with a list of officers, etc. If there was a full attendance here, there would be no objection whatever to taking the opinion of the members. I see absolutely no reason why such referendum should not be made. As to the Secretary's statement that he has no records, he has, I take it, a list of all Special Agents.

The Secretary—I have not.

Mr. Dornin—That you will have, and those could be sent to the managers to go to their representatives who are, or ought to be, members of the Association. I like the principle of referendum. I have attended lately meetings of two or three societies of which I have been a member, in which it has been very difficult to get a quorum; in fact, they have had to drum up the members in order to do so. In the Society of Pioneers, it was

found very difficult to get together the necessary sixty members to pass upon a very important measure out of some four or five hundred members of the Society. What they did at that time was a matter of vital importance to the Society, and yet there was so little apparent interest that they would not turn out. The transaction involved the investment of several hundred thousand dollars, mortgages, and so on. So the difficulty was overcome in that way, by sending out cards to the members to return with their votes declared upon them. Sometimes the Merchants' Association for instance, if there is an important matter on hand whereon they want the opinion of the members of the Association in San Francisco, sends out circulars to its members with the request, You will answer Yes or No to these various queries, and in that way they have gotten, for example, an expression of opinion in regard to this matter of doing away with steamer day as a collection day. There were ninety-five per cent of the votes of the Association in favor of abolishing it, and yet the merchants could only be reached in that way, as it was impossible to get a meeting of the business men large enough to know what the real sentiment was upon the sentiment in any other way. I see no reason why this matter should not be treated in the same way.

Mr. Fuller—It occurs to me, Mr. President, that this measure will require an amendment to be voted upon at the next annual meeting of the Association, that is, that it must be proposed now and reported on at the next meeting. If that be true, then this plan would not be in accordance with the Constitution.

The President—It would not be in effect at the next annual meeting, by referendum.

Mr. Gunn—I think, Mr. President, that when that paragraph was drawn, it was the understanding with Mr. Folger and myself that it should meet the very objection that Mr. Dornin raises. That is, if we make the change in the Constitution, there is in this paragraph a year's notice to that effect, and it will be published in the proceedings, which will give notice to all the members, and then next year, if you don't wish this amendment to prevail, all that is necessary is to defeat it. It will probably be the first order of the business that will come up next year,

taking precedence of the papers and all other business except the usual preliminary business. That should be so, because if our idea is right, and a nominating committee is to be selected for the next meeting, it should be selected on the morning of the first day, so that they will have two days in which to prepare the slate.

Mr. Kinne—This is a pretty good referendum, I think.

The President—There is no second to Mr. Dornin's motion.

Mr. Dornin—I will withdraw it.

The President—I will now call upon Mr. Fuller to read the report of the same Committee, upon the President's Address.

COMMITTEE REPORT.

Mr. President and Gentlemen:

Your committee to whom was referred the President's Address, beg to report as follows:

I.

We endorse, generally, the several recommendations and suggestions contained in the annual address, and we congratulate the President, not only on his able and thoughtful message, but on the high class and instructive program presented at this meeting, all prepared, necessarily, under trying and extraordinary circumstances.

II.

Regarding the President's suggestion that an Assistant Secretary be appointed, we recommend that the question be referred to the present Secretary and the Executive Committee, with power to take such action as they may agree upon.

III.

We heartily approve of the recommendation that the work of the Insurance Institute be resumed at as early a date as possible, and we suggest that a Special Committee be appointed for the purpose of bringing about such reorganization.

Respectfully submitted,

J. L. FULLER,
HERBERT FOLGER,
JOHN W. GUNN,

Committee.

The President—Gentlemen, you have heard the report of the Committee on the President's Address. What is your pleasure?

Mr. Kinne—I move its adoption.

The Secretary—I second the motion.

The motion was unanimously carried.

The Secretary—Mr. President, for the good of the Association, I have what is to me, a very pleasant letter to read.

Oakland, Cal., Jan. 15, 1907.

Mr. Calvert Meade, Secretary:

Dear Sir—According to my promise, I enclose herewith check for \$100 payable to the Association to be applied to the restoration of the Association's Reference Library. Kindly sign receipts in duplicate and return in due course.

Yours truly,

ROLLA V. WATT, Manager.

(Applause.)

This is a habit, gentlemen, that I hope others of the Association will also fall into. The more I can receive for the Association and its library, the better we will all be pleased.

The President: Speaking for the Association, we are very pleased indeed, to have the check, and speaking for the Companies, we are very glad to give the check. (Laughter.)

The next in order is the election of officers. The first officer to be elected is the President. Nominations are now in order for the office of President of the Association.

Mr. Tiedemann: Mr. President and gentlemen: I take pleasure in nominating for the office of President of this Association for the ensuing year, Mr. Arthur M. Brown. I have known Mr. Brown for twenty long years, and I know that his interests in this Association are very keen, indeed. I think Mr. Brown is known to you all. In nominating him, I feel very certain that you will find in him a most able President and a gentleman well suited and qualified to fill the duties of the important office which has been so well and ably filled by your good self, our retiring President. Gentlemen, I repeat that I am greatly pleased to place in nomination, Mr. Arthur M. Brown.

(Applause.)

The nomination was seconded from different parts of the house.

The President: Are there any other nominations for President? Hearing none, I declare the nominations closed.

Mr. Fuller: I move that the Secretary cast the ballot of the Association for Mr. Arthur M. Brown, as President of the Association for the ensuing year.

The motion was duly seconded.

The President: If there is no objection, that will be the order. Hearing none, I will ask the Secretary to cast the ballot of the Association for Mr. Arthur M. Brown as President.

The Secretary: The ballot is so cast, Mr. President.

The President: The Secretary informs me that the ballot has been so cast. I therefore declare Mr. Arthur M. Brown duly elected President of the Association. I wish Mr. Brown were here, so that I could call upon him for a speech. I think for once, as Mr. Dornin says, his modesty has been too much for him.

Nominations are now in order for Vice-President of the Association.

Mr. Fuller: Mr. President, I desire to place in nomination for the office of Vice President of this Association a member who has done his full share towards promoting the welfare of the Association. It is unnecessary for me at this time to extol his virtues, because you are all well acquainted with his qualifications. I desire therefore, to merely place in nomination for the office, Mr. John W. Gunn. (Applause).

Mr. Gibbons: I second the nomination.

The President: From the applause, it does not sound as if the nomination needed any second. Are there any other nominations for the office of Vice President, Hearing none, the nominations are declared closed.

Mr. Kinne: I move that the Secretary cast the ballot of the Association for Mr. John W. Gunn as Vice President of the Association.

The motion was duly seconded and carried unanimously.

The President: The Secretary is instructed, in accordance with the motion, to cast the ballot of the Association, for Mr.

John W. Gunn for the office of Vice President of the Association for the ensuing year.

The Secretary: The ballot is so cast, Mr. President.

The President: The Secretary advises me that the ballot has been cast as moved. I therefore announce that Mr. Gunn is the duly elected Vice President of this Association. I am glad that my position gives me the opportunity of being the first one to congratulate the Association on the acquisition of a man that I am sure will serve the Association well. I think the Association is to be congratulated. (Applause and cries of "Speech.")

Mr. Gunn: Mr. President and gentlemen: It has just been said that Mr. Brown side-stepped this meeting because of his modesty. I hope the fact that I am here will not be charged up to my immodesty. I only have to say that I thank you very much, and that I shall endeavor to do my best to keep up the splendid record that has been made by other officers of the Society before me, down to and including your good self as President.

The President: Next in order is the election of three members of the Executive Committee. The retiring members of the Board are Mr. Weinmann, Mr. Watt and Mr. Osborn. Under the Constitution, the in-coming President and the out-going President are members of the Executive Committee, and we are to elect three other members to make up the Committee. Nominations are now in order.

Mr. Kinne: As to the qualifications, Mr. President.

Mr. President: I am reminded by Colonel Kinne to state to you the qualifications of members of the Executive Committee, which are simply that they must be Past-Presidents of the Association.

Mr. Dornin: Mr. President, I have been requested to do so, and it gives me great pleasure to nominate for member of the Executive Committee, Mr. Herbert Folger. He is a man in every way qualified to act in that capacity.

Mr. Kinne: In looking around among the Past-Presidents, Mr. President, I have concluded that the best idea is to do just exactly what Mr. Dornin has done, and that is, to nominate a

man for that position who has the qualification of being a Past-President, as well as all other qualifications for the office, and not to nominate from among the old gray heads like Dornin and myself. It therefore gives me pleasure to nominate one of the more recent Past-Presidents, whom we all know did splendid duty when he was President, and I know it will be his pleasure to assist in every way, our in-coming President, Mr. Brown. I nominate Mr. W. H. Gibbons, as one of the Executive Committee.

Mr. Mendell: It is my pleasant duty, gentlemen, to follow after Uncle George Dornin, and Colonel Kinne, and nominate as a member of this Executive Committee, a man who will, I am sure, be congenial and useful, and a great addition to the Committee, and that is our friend, Mr. J. L. Fuller. I place him in nomination.

Mr. Gunn: I desire to resort to the old trick, Mr. President, and move that the nominations be now closed.

The motion was duly seconded, and unanimously prevailed.

The President: Messrs. Folger, Gibbons and Fuller have been nominated as candidates for the office of members of the Executive Committee, and the nominations have been declared closed. We will now proceed to vote for those gentlemen. I think as they are the only nominees, it can be done by a rising vote.

After a unanimous rising vote, the President declared Messrs. Folger, Gibbons and Fuller duly elected to serve, in connection with the in-coming President and the retiring President, as the Executive Committee of the Association for the ensuing year.

The President: Next in order, gentlemen, is the election of a Secretary.

Mr. Kinne: It has always been a great pleasure to me to place in nomination for the office of Secretary of this Association the man who has been acting as such for a good many years, but this year, it is with more than the usual cheerfulness that I rise to place in nomination one who has done perhaps better service, everything considered, than any other Secretary that we have ever had, and who not only has done good service

as such, but who has helped everything along, and who now really wishes to retire. After several personal suggestions from the members who are vitally interested in the welfare of this Association, Mr. Calvert Meade has decided, considerably against his will, to consent to serve for another year. He is aware of the status of the Association, in the past years, he knows the work he has done, as well as ourselves, and he rather wants to take a rest. But, as I say, we have prevailed upon him to accept the office for one more year. I believe that someone will take pleasure in moving that the nomination close, and that we elect by unanimous vote, Mr. Calvert Meade for the office of Secretary of the Association. (Applause.)

Mr. D. A. Spencer: I take great pleasure in making that motion, Mr. President, that the nominations be closed, and that Mr. Calvert Meade be unanimously elected Secretary of this Association.

Both motions were duly seconded.

The President: It is moved and seconded that the nominations be declared closed, and also that Mr. Calvert Meade be declared unanimously elected Secretary of this Association for the coming year.

The motion was put and unanimously carried.

The President: In declaring Mr. Meade our duly elected Secretary, I desire to say that one must hold the office of President of this Association to appreciate at its full value the work that Mr. Meade has been doing. I really do not know what the Association would have done without him this year of all others. While I know he was very anxious to retire, and so much so that we canvassed the field for a Secretary, we finally had to come to him and ask him if he would not serve us for one more year, while we are getting things in shape, after the experience that we have all been through.

The next in order is the nomination of a Treasurer.

Mr. Kinne: As it has been the custom for some years past, Mr. President, that our Secretary should also be the Treasurer of the Association, I place in nomination Mr. Calvert Meade for that office also.

The nomination was duly seconded, and on motion. the nominations were declared closed, and Mr. Calvert Meade was declared the duly elected Treasurer of the Association for the ensuing year.

The President: That brings to a conclusion, gentlemen, the business of this meeting. I only want to say to you that I thank you all for the attendance that we have had at this meeting. It has been far ahead of my expectations. I entered into the preparation for this meeting with a great deal of misgiving. I appreciated how we were all scattered, how very busy we were, what there was before each and all of us, especially at the beginning of the year. But I think I can say that the meeting has been a successful one. That is due to the fine attendance, and the enthusiasm which has been displayed by all of the members. I thank you all.

Mr. Kinne: Gentlemen, the remarks that were made a few moments ago in speaking of Mr. Meade, and his excellent service during the past very arduous year apply equally to the excellent service rendered us by our retiring President. The President's allusion to Mr. Meade's good work is entirely proper and in order. But I conceive it to be most fitting that this body pass a special vote of thanks this year for the careful and energetic manner in which Mr. F. B. Kellam has guided the affairs of the Association during the year. We have had a larger attendance than was expected, either by him or by any of the rest of us. The meeting has been in every way a successful one, as to its progress, and in every direction. I therefore move that a special vote of thanks be extended to President Kellam, and I call upon Mr. Gunn to act as Chairman for the purpose of the motion.

Mr. Dornin: I had risen, Mr. President, for exactly the same purpose that called Colonel Kinne to his feet. I regret exceedingly that I was not able to hear each of the papers on the program, but some matters that I had on hand with the Insurance Commissioner (I gave him some figures today), have prevented. But it seems to me from such of the papers as I have heard, technical and otherwise, that they were of exceptional merit all the way through, and opportune. And I shall read,

and I believe all of you will read with more than passing interest, those papers when they are printed. On yesterday I brought up the matter of having the paper of Professor Hyde printed for distribution. I believe that it is of great value to us that it be placed in the hands of agents in the smaller towns. The disaster of last April has brought this thing home to us with tremendous force. Such papers are of great value, and should not be hidden away in the libraries of the various offices, but should, on the contrary, be put in such shape that we can all use them. I shall be very glad to pay for a sufficient number to send out to the agents of the Springfield, at twice the cost of production, and that the difference may go into the library fund. I believe that others are of the same opinion. I have digressed in speaking of that, but it occurred to me while I had the thought in mind, as I said, of the high character of the papers that I have heard, and from the titles of the others as well, they all seem so opportune that it shows a most careful consideration and discernment on the part of our President. I therefore second the motion of Colonel Kinne with a great deal of pleasure.

Mr. Gunn: Gentlemen, you have heard the motion. Are there any further remarks to be made? If not, I just desire to say that Mr. Brown will be sorry that his modesty kept him away this afternoon, because I believe it will be perhaps the most pleasurable instance in connection with my office in the Association, to put this motion, which accords to Mr. Kellam, his good nature and his hard work in making the past year of this Association a success, and at such a critical time, what I believe he so fully deserves. I will ask you to give your sanction to the motion by a rising vote.

(The motion passed by a rising vote).

Mr. Gunn: Mr. President, it is with great pleasure that I tender you the hearty thanks of this Association for the strenuous work that you have done in the past year, and the great success you have made of your administration.

Mr. Kellam: I thank you very much, gentlemen, for that vote. I can only say that it has been a great pleasure to me to have the meeting successful, and I am very glad of it. As

I said in my address, it seemed probable that I should be compelled to inspire my successors by precept rather than by example, but that I was willing to accept that with all the philosophy at my command. Your very kind remarks and your vote lead me to think that perhaps there may be some slight modicum of example also.

As there is no further business before this meeting, a motion to adjourn will be in order. But prior to such a motion being made, I would like to remind you that the Annual Banquet will be held this evening at the Palace Hotel, on the corner of Post and Leavenworth streets, at 7 o'clock, and those who have not sent in their names to the Dinner Committee should do so immediately.

Mr. Fuller: I now move, Mr. President, that the Thirty-first Annual Meeting of the Fire Underwriters Association of the Pacific be now adjourned.

The motion was duly seconded, and the meeting adjourned.



GUESTS AT THE BANQUET.

F. B. Kellam	J. K. Urmston	Grayson Dutton
Arthur M. Brown	C. D. Gabrielson	J. R. Quick
E. Myron Wolf,	Chas. A. Wendler	Louis Weinmann
Albert W. Whitney	F. H. Farr	A. C. Thornton
C. G. Hyde	E. P. Eldred	T. D. Boardman
H. H. Brown	J. H. Banks	C. G. White
W. S. Gibb	Walter H. Young	E. V. Culver
W. H. Gibbon	Geo. E. Robins	E. C. Morrison
W. P. Porep	C. A. Craft	Geo. W. Spencer
J. H. Burgard	F. C. H. Robins	Wm. Macdonald
F. J. Devlin	J. H. Richards	D. E. Miles
H. R. Jackson	Robert W. Neal	J. A. Murphy
A. J. Penfield	T. J. A. Tiedemann	W. H. Breeding
C. E. Schlinghyde	H. J. Cook	A. R. Muir
W. J. Dutton	H. L. A. Bates	J. C. Winterburn
C. G. Heifner	J. Hunter Harrison	Rudolph Herold
Herbert Folger	F. G. Smith	Henry Ward
W. H. Lowden	Russell W. Osborn	J. S. French
W. P. Abel	J. E. Crandall	S. Simmons
J. L. Fuller	C. H. Anderson	Edw. G. Ford
W. B. De Jarnatt	John C. Dornin,	Geo. A. Crux
J. H. Fuller	R. A. Lucas	A. E. Bailey
H. F. Gordon	Geo. D. Dornin	M. D. Bailey
Geo. O. Hoadley,	Wm. Sexton	J. C. Cunningham
Frank Hunter	Geo. W. Dornin	W. F. Zwick
L. A. Moore	J. F. R. Webber	A. K. Fiske
W. V. Windus	Wm. Frank	R. De Lappe
H. B. Washington	Geo. C. Codding	Harry W. Mace
F. O. Affeld	Franklin Bangs	Stanley Webster
T. T. Frith	P. de S. Olney	J. J. Dennis
W. B. Honeyman	E. T. Niebling,	R. E. Dollard,
J. B. Walden,	Fred R. Stover	Geo. E. Devine
D. L. Stewart	F. L. Haupt	Adam Gilliland
H. R. Burke	Perry W. Matthews	Dixwell Hewitt
John T. Fogarty;	John R. Strader	W. W. Grove
Rolla V. Watt	J. B. Trumbull,	P. H. Griffith

W. O. Morgan
M. E. Spaulding
C. E. Miller
Geo. T. Gray
C. B. Flack
L. B. Edwards
I. S. Watson
B. Goodwin
E. H. Bacon
Calvert Meade
C. W. Hawxhurst

C. H. Ward
G. A. R. Heuer
H. Danker
E. A. Dakin
R. H. Naunton
Gustave Palmer
C. S. Myrick
C. Mason Kinne
Harrison Houseworth
J. W. Gunn

R. H. Rountree
S. W. Lowe
Samuel D. Mayer
V. Carus Driffield
Paul M. Nippert
W. L. W. Miller
W. M. Speyer
Clinton Folger
O. E. Schnabel
D. A. Parker



FRANK GRAHAM ARGALL

Born May 20, 1861.

Died Nov. 20, 1906.

An Appreciation from a personal view point.

I first met our deceased friend some thirteen years ago, when I became Special Agent for the companies of Messrs. Balfour, Guthrie & Co.'s General Agency. Argall was then Chief Clerk. Anyone who has been a new boy at school, or made a shy excursion into a strange domain, will appreciate and always remember the first friendly hand and welcoming word. Argall made me feel at home at once, and I have never forgotten it. His life was full of these daily unremembered acts of small kindness, and surely when his record is made up, these, as the proffered cup of cold water, will set off many an error.

Frank Graham Argall was born in London and received his early education there. His family subsequently moved to Devonshire, and he went up from there to Cambridge, but owing to sickness did not take his degree. Thence he went to the County Fire Office in London, of which his uncle was Secretary. He came to America with his wife and daughter in 1887, where he entered the "Queen" Fire Office in Chicago. After a short stay in Chicago, he came to San Francisco, his first employment here being with Mr. Dornin, then with Mr. Dickson, and finally with the Insurance Department of Messrs. Balfour, Guthrie & Co. under Mr. George W. Spencer, where he became Assistant Manager at the time of the latter's resignation. For the last eight years he had been an independent adjuster.

There are some of us who have a knowledge of the fire contract and are capable of its logical application, and there are some of us who have tact and diplomacy in dealing with claimants; but I frankly yield precedence to our deceased fellow-member, as one who possessed pre-eminently both qualities. He easily ranked us all. In fact, these qualities of mind and heart, or rather temperament, are seldom so united in anyone of any profession or occupation. His mind had a peculiar quality of thoroughness in that it never took anything for granted, but went to the root of all matters. He had the objective faculty, the ability to see things as they are, which is the proof of mental superiority. In all my intercourse with him I never heard him use a harsh word, and while many times I have lost patience in some of our interminable arguments, he played the better part, for he never lost his.

Much am I indebted to him, and freely and lovingly do I lay such small flowers on his grave as my humble rhetoric may possess.

Shortly after his return from a trip to Alaska he went to Fruitvale, near the foothills, to recuperate from illness. It is too painful for me to dwell on the subject of his lonely death there in view of the Golden Gate, so far from his Devonshire home. When at his funeral I stood by his silent, shrouded form there came to my mind a scrap of Latin he would have well loved:

Itur in antiquam silvam.

HENRY McDONALD SPENCER.

San Francisco, California, January 25, 1907.

GEORGE F. GRANT

Little need be said in eulogy of him who recently passed to the undiscovered country. It required not the touch of the Death Angel to reveal the sterling qualities of George Grant. While with us he won our esteem and affection for he was kind, unselfish and sympathetic. His presence was cheering; his friendship unfailing; his soul sincere. He was indeed "a fellow of infinite jest, of most excellent fancy," with a rare gift of expression, both vocal and written. He played well his part in this brief act of life's drama and, we hope, has entered on a broader stage of action. The world is better for his genial and gentle nature.

We deeply mourn his departure, yet our cloud of sorrow is brightened by memory's golden rays. Again we recall his genial presence; feel his hearty grasp and hear his merry laugh and words of counsel and good cheer. He is gone but not forgotten and long will be held in fond recollection.

"None knew him but to love him;
None named him but to praise."

EDWARD NILES.

Charter Members of the Underwriters' Association of the Pacific.

Organized February 23 1876.

- Bailey, Jas. D., General Agent, Union Insurance Co.
- *Barnes, E. T., General Agent, California Insurance Co.
- Bigelow, H. H., General Agent, Home Mutual Insurance Co.
- Brush, R. G., City Agent, State Investment & Insurance Co.
- *Brown, Edw., General Agent, Faneuil Hall & Lycoming Insurance Cos.
- Bromwell, L. L., Special Agent, Phoenix and Home Insurance Cos.
- *Bryant, A. J., President State Investment & Insurance Co.
- *Callingham, Wm. J., General Agent, Royal Canadian Insurance Co.
- *Clark, Z. P., Agent, German-American Insurance Co.
- Dick, B. C., Agent, Kansas Insurance Co.
- Dickson, Robt., Manager, Imperial, Northern & Queen Insurance Cos.
- *Doolan, Wm., Special Agent, State Investment & Insurance Co.
- Dornin, Geo. D., Secretary, Fireman's Fund Insurance Co.
- *Garniss, J. R., Adjuster.
- *Grant, Geo. F., Special Agent, North British & Mercantile Ins. Co.
- *Gunnison, A. R., Special Agent, Commercial Ins. Co. of California.
- *Hart, J. W., Agent, Scottish Commercial Insurance Co.
- *Houghton, J. F., President, Home Mutual Insurance Co.
- Landers, Wm. J., Manager, San Francisco Agency, Guardian Assurance Co.
- *Lowe, B. F., Adjuster.
- Macdonald, William, Surveyor, Board of Fire Underwriters.
- Magill, R. H., General Agent, Home Mutual Insurance Co.
- Potter, E. E., of Potter, Jacobs & Easton, General Agents.
- Sexton, Wm., Special Agent, Fireman's Fund Insurance Co.
- Smith, A. D., General Agent, Northwestern, Amazon & Fairfield Insurance Cos.
- *Smith, Henry, Special Agent, Liverpool & London & Globe Ins. Co.
- Snow, H. W., Special Agent, Commercial Union Assurance Co.
- Spencer, Geo. W., Special Agent, Aetna Insurance Co.
- *Staples, J. W., Adjuster.
- *Deceased.

OFFICERS AND COMMITTEES.

List of Officers and Committees of the Fire Underwriters' Association of the Pacific, since organization:

Year	President	Vice-President	Secretary-Treasurer
1876	*Benjamin F. Lowe	Henry H. Bigelow	*John W. Staples
1877	George D. Dornin	*Wm. L. Chalmers	*John W. Staples
1878	*Augustus P. Flint	*Edward Brown	*John W. Staples
1879	*Casper T. Hopkins	Andrew D. Smith	*John W. Staples
1880	Geo. W. Spencer	E. W. Carpenter	*John W. Staples
1881	Louis L. Bromwell	*Geo. F. Grant	*John W. Staples
1882	*George F. Grant	E. W. Carpenter	*John W. Staples
1883	E. W. Carpenter	William Sexton	Robert H. Naunton
1884	William Sexton	C. Mason Kinne	*C. P. Farnfield
1885	C. Mason Kinne	*Zenas P. Clark	Robert H. Naunton
1886	*Zenas P. Clark	*John W. Staples	Robert H. Naunton
1887	*John W. Staples	*Wm. L. Chalmers	Bernard Faymonville
1888	*Wm. L. Chalmers	L. B. Edwards	Bernard Faymonville
1889	L. B. Edwards	*Wm. J. Callingham	Thomas W. Fenn
1890	B. Faymonville	Wm. H. Lowden	Robert H. Naunton
1891	Wm. H. Lowden	Henry M. Grant	George H. Tyson
1892	Henry M. Grant	Stephen D. Ives	Edward Niles
1893	Stephen D. Ives	Rolla V. Watt	Russell W. Osborn
1894	Rolla V. Watt	V. Carus Driffield	Russell W. Osborn
1895	V. Carus Driffield	Herbert Folger	Louis Weinmann
1896	Herbert Folger	R. W. Osborn	Louis Weinmann
1897	R. W. Osborn	Edward Niles	Calvert Meade
1898	Louis Weinmann	Louis Weinmann	Calvert Meade
1899	Edward Niles	Frank J. Devlin	Calvert Meade
1900	Frank J. Devlin	Geo. W. Dornin	Calvert Meade
1901	Geo. W. Dornin	Wm. H. Gibbons	Calvert Meade
1902	Wm. H. Gibbons	Whitney Palache	Calvert Meade
1903	Whitney Palache	Jacob L. Fuller	Calvert Meade
1904	Jacob L. Fuller	A. W. Thornton	Calvert Meade
1905	A. W. Thornton	F. B. Kellam	Calvert Meade
1906	F. B. Kellam	Arthur M. Brown	Calvert Meade

*Deceased.

EXECUTIVE COMMITTEE.

1876	L. L. Bromwell	James R. Garniss	*George F. Grant
1877	*Edward Brown	William J. Sanders	Andrew D. Smith
1878	Andrew D. Smith	Oliver H. Cole	George W. Spencer
1879	*Augustus P. Flint	William Macdonald	*Albert R. Gunnison
1880	*George F. Grant	*Edward Brown	Oliver H. Cole
1881	George W. Spencer	E. W. Carpenter	C. Mason Kinne
1882	Thomas E. Pope	Andrew D. Smith	*Thomas A. Mitchell
1883	*George F. Grant	Harvey W. Snow	Oliver Hawes
1884	*George F. Grant	Harvey W. Snow	Oliver Hawes
1885	*George F. Grant	Harvey W. Snow	Oliver Hawes
1886	*H. K. Belden	*George F. Ashton	Calvert Meade
1887	*H. K. Belden	*George F. Ashton	Calvert Meade
1888	*W. J. Callingham	George C. Pratt	Rolla V. Watt
1889	B. Faymonville.	Wm. H. Lowden	*Henry K. Belden
1890	*H. K. Belden	George Easton	Henry M. Grant
1891	*H. K. Belden	George Easton	Alfred Stillman
1892	Alfred Stillman	George Easton	V. Carus Driffield
1893	V. C. Driffield	Wm. H. Lowden	William Sexton
1894	Herbert Folger	Franz Jacoby	Jas. H. De Veuve
1895	R. W. Osborn	Frank J. Devlin	John T. Fogarty
1896	Frank J. Devlin	George W. Dornin	Whitney Palache
1897	*Frank G. Argall	Edward Niles	Robert P. Fabj
1898	Whitney Palache	*Wm. H. Bagley	Leslie A. Wright
1899	John T. Fogarty	Alfred R. Grim	Whitney Palache
1900	Edward Niles	Wm. H. Lowden	Russell W. Osborn
1901	Frank J. Devlin	Rolla V. Watt	William Sexton
1902	Geo. W. Dornin	Herbert Folger	Louis Weinmann
1903	W. H. Gibbons	Herbert Folger	Louis Weinmann
1904	Whitney Palache	W. H. Gibbons	George W. Dornin
1905	J. L. Fuller	A. W. Thornton	W. H. Gibbons
	Whitney Palache		Geo. W. Dornin
1906	A. W. Thornton	F. B. Kellam	R. W. Osborn
	Louis Weinmann		Herbert Folger

LIBRARY COMMITTEE.

1876	Geo. W. Spencer	Robert M. Magill	Eyron C. Dick
1877	*James W. Hart	Hugh Craig	Samuel D. Mayer
1878	J. W. Kinsley	Geo. W. Spencer	Ludwig Beck
1879	Oliver H. Cole	Jos. C. Jennings	Wm. J. Landers
1880	Geo. E. Butler	*Edward Brown	Chas. J. Van Tassel

*Deceased.

LIBRARY COMMITTEE—Concluded.

1881	*John W. Staples	*Wm. J. Callingham	Robert H. Naunton
1882	Geo. W. Spencer	*Samuel O. Hunt	*John W. Staples
1883	*John W. Staples	Geo. W. Spencer	Robert H. Naunton
1884	*Casper T. Hopkins	Geo. D. Dornin	*Andrew J. Bryant
1885	Geo. W. Spencer	William Sexton	*Samuel O. Hunt
1886	Geo. W. Spencer	William Sexton	
1887	Geo. W. Spencer	Rudolph Herold, Jr.	Thos. E. Pope
1888	Geo. W. Spencer	Edwin W. Carpenter	*John W. Staples
1889	Geo. W. Spencer	Edwin W. Carpenter	*John W. Staples
1890	Geo. W. Spencer	Edwin W. Carpenter	
1891	Geo. W. Spencer	Edwin W. Carpenter	*Alex. J. Wetzlar
1892	Geo. W. Spencer	Herbert Folger	Jas. H. De Veuve
1893	Herbert Folger	*Henry K. Belden	Richard C. Medcraft
1894	*Alex. J. Wetzlar	A. G. Dugan	Benj. J. Smith
1895	A. G. Dugan	Herber Folger	Edw. P. Farnsworth
1896	*Frank G. Argall	Geo. W. Dornin	*Charles C. Echlin
1897	William Maris	*Charles C. Echlin	Herbert Folger
1898	Herbert Folger	Benj. J. Smith	Frederick B. Kellam
1899	Herbert Folger	H. McD. Spencer	Whitney Palache
1900	Herbert Folger	Frederick B. Kellam	*Frank G. Argall
1901	Jacob L. Fuller	Charles B. Hill	Peter F. Gilroy
1902	Jacob L. Fuller	Peter F. Gilroy	Frederick B. Kellam
1903	A. M. Brown	Clinton Folger	D. A. Spencer
1904	W. H. Lowden	Herbert Folger	Benj. J. Smith
1905	W. H. Lowden	Herbert Folger	Benj. J. Smith
1906	W. H. Lowden	Herbert Folger	Benj. J. Smith

CALIFORNIA KNAPSACK.

1879	Charles Mason Kinne, Editor	W. Macdonald, Associate Editor
1880	Charles Mason Kinne, Editor	
1881	Charles Mason Kinne, Editor	*G. F. Grant, Associate Editor
1882	Charles Mason Kinne, Editor	
1883	Charles Mason Kinne, Editor	
1884	Charles Mason Kinne, Editor	
1885	*George F. Grant Editor	
1886	*George F. Grant, Editor	
1887	Edwin W. Carpenter, Editor	
1888	*Alexander J. Wetzlar, Editor	
1889	*Alexander J. Wetzlar, Editor	
1890	*George F. Grant, Editor	

*Deceased

CALIFORNIA KNAPSACK—Concluded.

1891	*George F. Grant, Editor	
1892	*George F. Grant, Editor	
1893	*George F. Grant, Editor	
1894	*George F. Grant, Editor	Edward Niles, Associate Editor
1895	*George F. Grant, Editor	Edward Niles, Associate Editor
1896	*George F. Grant, Editor	Edward Niles, Associate Editor
1897	*George F. Grant, Editor	Edward Niles, Associate Editor
1898	*George F. Grant, Editor	Edward Niles, Associate Editor
1899	*George F. Grant, Editor	Edward Niles, Associate Editor
1900	*George F. Grant, Editor	Edward Niles, Associate Editor
1901	*George F. Grant, Editor	Edward Niles, Associate Editor
1902	*George F. Grant, Editor	Edward Niles, Associate Editor
1903	*George F. Grant, Editor	Edward Niles, Associate Editor
1904	*George F. Grant, Editor	Edward Niles, Associate Editor
1905	*George F. Grant, Editor	Edward Niles, Associate Editor
1906	*George F. Grant, Editor	Edward Niles, Associate Editor

DINNER COMMITTEE.

(From first banquet in 1881, George W. Spencer, retiring president, to the present time.)

George W. Spencer

*George E. Grant.

*Deceased.



LIST OF MEMBERS--JANUARY, 1907.

ACTIVE MEMBERS.

- Agnew, F. J., Special Agent, Pennsylvania Fire Ins. Co.
Alverson, W. W., with Continental Ins. Co.
Anderson, C. H., Special Agent, Springfield Ins. Co.
Ankele, J. H.
Bailey, A. E., Special Agent, Insurance Company of North America.
Bailey, J. D., General Agent, Insurance Company of North America.
Bailey, A. T., Special Agent Home F. & M. Insurance Company.
Bangs, Franklin, Secretary, Home F. & M. Insurance Company.
Bates, H. L. A., Manager Shawnee Ins. Co.
Banks, J. H., Special Agent, Hamburg-Bremen Fire Ins. Co.
Benner, Harry, Special Agent, German-American, Phoenix, New Hampshire and German Alliance Ins. Co's.
Bertheau, C., Manager, Aachen & Munich and Hanover Ins. Co's.
Blanchard, H. P., Ass't. Secretary, Fireman's Fund Insurance Co.
Bliss, Walter E., Special Agent, Milwaukee Mechanic Ins. Co.
Boardman, Geo. C., of Boardman & Spencer, Gen. Agents, Aetna Ins. Co.
Bromwell, L. L., General Agent, Milwaukee Mechanics Ins. Co.
Brooks, Geo. W., Secretary, California Ins. Co.
Broomell, B. B., Special Agent and Adjuster.
Brown, A. M., of E. Brown & Sons, General Agents, Svea, Agricultural and Globe & Rutgers.
Brown, H. H., of E. Brown & Sons.
Brush, R. G., Special Agent, Liverpool & London & Globe Ins. Co.
Burke, H. R., Special Agent, Royal and Queen Insurance Companies.
Campbell, Warren, Special Agent for Manager Conroy's Companies, Los Angeles, Cal.
Chipman, W. F.
Christensen, Chas., of Christensen & Goodwin, Managers, American Central, St. Paul and Mercantile Ins. Co's.
Chapuis, F. A., Manager Seaboard Ins. Co.
Cleveland, W. W., of Cleveland & Trathen, Managers, Franklin Fire Ins. Co.
Coddington, Geo. C., Special Agent, Springfield Ins. Co.

- Colvin, Chas. A., Special Agent, Phoenix Ins. Co.
- Cronroy, T. J., Manager, Caledonian and Rochester German Ins. Co's.
- Cosgrove, J. E., Special Agent Northern Assurance Co.
- Craig, Homer A., General Adjuster, Pennsylvania Fire Ins. Co.
- Crooks, J. C., Special Agent, E. Brown & Sons Agency.
- Crux, Geo. A., Assistant Manager, Caledonian and Rochester German Insurance Companies.
- Cunningham, Jas. C., Special Agent, American Central, St. Paul, and Mercantile.
- Dollard, Robert E., Special Agent, Hartford Fire Ins. Co.
- Danker, H., with Western Assurance Co.
- Davenport, Dixwell, Special Agent, Phoenix Assurance Co.
- Davis, Arthur P. Special Agent, Queen City Fire Ins. Co.
- De Lappe, R., Special Agent, American Central, St. Paul and Mercantile Ins. Co's.
- Dennis, Jas. J., Special Agent, Hartford Fire Ins. Co.
- DeVeuve, Clarence, Gen'l. Agent, Seattle F. & M. Ins. Co.
- Devlin, Frank J., Manager, Atlas and Manchester Assurance Co's.
- Devine, Geo. E., Special Agent, Hartford Fire Ins. Co.
- Dickson, Frank W., Manager, Royal Exchange Assurance Co.
- Dollard, Robert E., Special Agent, Hartford Fire Ins. Co.
- Dornin, Geo. D., Manager, Springfield Ins. Co's.
- Dornin, Geo. W., Ass't. Manager, Springfield Ins. Co.
- Dornin, John C., Ass't. Manager, Springfield Ins. Co.
- Driffield, V. Carus
- Dutton, W. J., President, Fireman's Fund Insurance Co.
- Dutton, Grayson, Special Agent, Fireman's Fund Ins. Co.
- Edwards, L. B.
- Eitel, Edw. E., Special Agent, Home F. & M. Insurance Co.
- Elwell, W. T., Special Agent, Aachen & Munich and Hanover Ins. Co's.
- Fabj, R. P., Special Agent, L. & L. & Globe Ins. Co.
- Farnsworth, Ed. P., Independent Adjuster.
- Farr, F. H., Special Agent, Royal and Queen Ins. Co's.
- Faymonville, Bernard, Vice-President, Fireman's Fund Insurance Co.
- Field, Alexander, District Manager Board of Fire Underwriters.
- Fogarty, J. T., Ass't. Manager Royal and Queen Insurance Co's.
- Folger, Clinton, Joint Manager, New Zealand Ins. Co.
- Folger, Herbert, Ass't. Gen. Agent, German-American, Phoenix and German Alliance Ins. Co's.
- Fores, Harry W., Field Representative, Scottish Union & National Insurance Co.

- Fortmann, W. G., Special Agent, Aachen, Munich and Hanover Ins. Co's.
- Foulkes, F. W., Special Agent, Phenix of Brooklyn.
- Frank, Wm.
- Francis, Guy, Special Agent, Connecticut Fire Insurance Co.
- French, John S., Special Agent, Fireman's Fund Ins. Co.
- Frith, T. T., Special Agent, London and Niagara Ins. Companies.
- Frudensfeld, L. S., Manager, Queen City Fire Ins. Co.
- Fuller, J. H., Special Agent, Norwich Union Fire Ins. Society.
- Fuller, J. L., Ass't. Manager, Norwich Union Fire Insurance Society.
- Gabrielson, C. D., Special Agent.
- Gallegos, R., Asst. Manager, Phoenix Assurance Co.
- Gaston, F. W., Field Representative, Scottish Union & National Ins. Co.
- Gerould, P. E., Special Agent.
- Gibbons, W. H., Special Agent, E. Brown & Sons General Agency.
- Giesy, A. W., Special Agent, Nor. Union Fire Ins. Soc'y.
- Gilliland, Adam, Special Agent, Hartford Fire Insurance Co.
- Goodwin, Benjamin, of Christensen & Goodwin, Managers American Central, St. Paul and Mercantile.
- Gordon, Harry F., of Gordon & Hoadley, General Agents, American N. J.
- Goggin, Gerald E., with London and Niagara Ins. Co.
- Grant, H. M., Independent Adjuster, Portland, Oregon.
- Grant, Tom C., General Agent, North British & Mercantile Ins. Co.
- Griffith, P. H., Special Agent, Hartford Fire Ins. Co.
- Griffith, John T.
- Grim, Alfred R., Assistant Manager, Aachen & Munich Ins. Co.
- Gunn, John W., Special Agent, Liverpool & London & Globe.
- Gutte, I.
- Haldan, E. B.
- Hally, F. W., Special Agent, Aachen & Munich and Hanover Ins. Companies.
- Hall, O. N. Special Agent, Phoenix Assurance Co.
- Hamilton, J. K., Special Agent, Insurance Co. of North America.
- Haven, Chas. D., Resident Secretary, Liverpool & London & Globe.
- Henry, Carl A., of C. A. Henry & Co., General Agents, Sun Ins. Office and Michigan F. & M. Ins. Co.
- Heuer, G. A. R., Special Agent.

- Hewitt, Dixwell, of Palache & Hewitt, General Agents, Hartford Fire Ins. Co.
- Herold, Rudolph.
- Hill, Chas. B., Special Agent, German-American and Phoenix Ins. Co's.
- Hill, Chas. S., Special Agent, Springfield Ins. Co.
- Hill, Wm. H., Special Agent, Edward Brown & Sons, Gen'l. Agency.
- Hoagland, W. W., Special Agent, Sun Ins. Office and Michigan F. and M. Ins. Co.
- Hopkins, W. B., Special Agent, London & Lancashire Fire Ins. Co.
- Houseworth, Harrison, Special Agent, Liverpool & London & Globe Ins. Co.
- Hunter, F. L., Resident Manager Northern Assurance Co.
- Hunter, R. D., Special Agent, Fireman's Fund Insurance Co.
- Ives, S. D., Vice-President, Home F. & M. Insurance Company.
- Jackson, W. A., Special Agent, Commercial Union and Palatine Ins. Co's.
- Jacoby Franz, Independent Adjuster.
- Kaltz, Bruce, Special Agent, Norwich Union Fire Ins. Society.
- Kellam, F. B., Branch Secretary, Royal and Queen Insurance Co's.
- Keller, W. F., Special Agent, American Central and St. Paul Ins. Co's.
- Kinne, C. Mason, Ass't. Resident Secretary, Liv. & Lon. & Globe.
- Klinger, Wm. M., Special Agent, Fireman's Fund Insurance Co.
- Kroesen, S. W., Special Agent, German-American and Phoenix Ins. Co's.
- Lamey, H. T., Manager Western Assurance and British-America Assurance Companies.
- Lamping, L. F., Special Agent, Royal Exchange Assur. Co.
- Landers Wm. J., Resident Manager, London and Niagara Ins Co's.
- Lindsay, A. N., Special Agent, California Ins. Co.
- Lockey, Richard, Independent Adjuster, Helena, Montana.
- Lord, H. Leslie, Special Agent, Sun and Michigan Ins. Co's.
- Lowden, W. H., Manager, Norwich Union Fire Insurance Society.
- Lyndall, Chas. P. Special Agent, Home F. & M. Insurance Co.
- Macdonald, Burns, Special Agent, Westchester Ins. Co.
- Macdonald, Wm., Manager, Westchester Ins. Co.
- McKowen, J. H., Independent Adjuster, Spokane, Wash.
- Manheim, H. S.
- Mann, H. R., Manager, New York Underwriters' Agency.

- Manning, F. J. H., Special Agent, Commercial and Palatine Insurance Companies.
- Manning, William, Special Agent, Atlas and Manchester Assurance Companies.
- Maris, Wm., Independent Adjuster.
- Mayer, F. J. Alex., Oregon State Agent Fire Ass'n of Philadelphia.
- McCarthy, C. V., Special Agent, Pennsylvania Fire Ins. Co.
- Meade, Calvert, Independent Adjuster, Secretary Fire Underwriters' Association.
- Medcraft, R. C., with Catton, Bell & Co.
- Mel, Louis, Special Agent, Aetna Insurance Company.
- Mendell, Geo. H., Jr.
- Mendell, Jno. M., Special Agent, London and Niagara Ins. Co's.
- Mesick, S. P., Special Agent, Pennsylvania Fire Ins. Co.
- Miles, D. E., Assistant Manager, Westchester Ins. Co.
- Miller, W. L. W., General Agent, British-America and Western Assurance Co's.
- Mills, Harrold, Special Agent, Phenix Ins. Co. of Brooklyn.
- Mitchell, Geo. M., Metropolitan Agent, Home and Westchester Fire Ins. Co's.
- Morgan, W. O., Special Agent, Hartford Fire Insurance Company.
- Morrison, Ed. C., Supervisor of Agencies, Aetna Insurance Co.
- Murphy, Joseph A., Special Agent, Aetna Ins. Co.
- Nason, A. G., General Agent, Continental Ins. Company.
- Naunton, R. H., Special Agent and Adjuster.
- Niebling, E. T., Manager, Commercial Union and Palatine Insurance Companies.
- Niles, Edward, Supt. of Agencies, North British and Mercantile Insurance Co.
- Nippert, Paul M., General Agent.
- Osborn, R. W., Manager, Pennsylvania Fire Ins. Co.
- Olney, P. de S., Special Agent, Commercial Union and Palatine Insurance Companies.
- Olds, A. C., State Agent, Phenix of Brooklyn.
- Palache, Whitney, of Palache & Hewitt, General Agents, Hartford Fire Insurance Co.
- Pierce, D. W., Special Agent, New York Underwriters.
- Porep, Walter P., Special Agent, Edward Brown & Sons.
- Quitow, V. H., Special Agent, Pennsylvania Fire Ins. Co.
- Raymond, W. H., Special Agent, Liv. & London and Globe Ins. Co.
- Reed, James S., Special Agent, Connecticut Fire Ins. Co.

- Richards, John D., with Norwich Union Fire Ins. Society.
Richards, J. H., Special Agent.
Robins, F. C. H., Independent Adjuster.
Rooklidge, J. W., Special Agent, Royal and Queen Ins. Co's.
Rountree, R. H., Special Agent, Liv. & London & Globe Ins. Co.
Schallenberger, C. A., with California Ins. Co.
Schlingheyde, C. E., Special Agent, Union and Law Union & Crown Assurance Co's.
Scott, Chas. O., Special Agent, Insurance Co. of North America.
Sewell, A. F., with New York Underwriters.
Sexton, Wm., General Adjuster, Fireman's Fund Insurance Co.
Sexton, Wm. A., Special Agent.
Smedberg, W. R.
Smith, Benj. J., Manager, Connecticut Fire Insurance Company.
Smith, Frank G., Special Agent, London & Lancashire Ins. Co.
Smith, C. W.
Smith, H. Brownson, Independent Adjuster, Butte, Montana.
Smith, H. H., Manager, Union Assurance and Law Union & Crown Insurance Companies.
Spaulding, M. E., Special Agent, Hartford Fire Ins. Co.
Spears, J. V., Special Agent, Fireman's Fund Ins. Co.
Spencer, D. A.
Spencer, Geo. W., of Boardman & Spencer, Gen'l. Ag'ts., Aetna Ins. Co.
Spencer, H. McD., Independent Adjuster.
Speyer, Walter M., Joint Manager New Zealand Ins. Co.
Speyer, Walter.
Staniford, F. C., Special Agent, Norwich Union Fire Ins. Society.
Stovel, C. J., General Agent, Jefferson, Girard, Nassau, New Brunswick and North River Ins. Co's.
Stover, Fred R., Special Agent, Royal and Queen Ins. Co.
Stoy, Samuel B., Special Agent, London & Lancashire Fire Ins. Co.
Strader, John E., Special Agent, Scottish Union & National Ins. Co.
Taylor, Churchill, of Watson, Taylor & Sperry.
Thieme, Oscar, Manager Austrian Phoenix Ins. Co.
Thompson, Chas. R., Special Agent, Fireman's Fund Ins. Co.
Thompson, E. R., Special Agent, Atlas and Manchester Assurance Company.
Thomson, M. H., Asst. Gen'l. Agt., National, Colonial Fire Underwriters.
Thornton, A. W., Special Agent, London and Niagara Ins. Co's.

- Thornton, A. C., Special Agent, Fireman's Fund Ins. Co.
Tiedemann, T. J. A..
Trathen, A. H., of Cleveland & Trathen, Managers Franklin
Fire Ins. Co.
Trumbull, J. B., Special Agent, Insurance Co. of North America.
Tyson, Geo. H., General Agent, German-American, Phoenix,
New Hampshire, and German-Alliance Ins. Co's.
Urmston, J. K., Special Agent, Royal and Queen Ins. Co's.
Von Etlinger, A. T., Special Agent, Commercial Union and Pala-
tine Ins. Co's.
Walden, J. B., Special Agent, Royal and Queen Insurance Co's.
Watson, Kenneth, of Watson, Taylor & Sperry.
Walsh, Frank E., Special Agent, Milwaukee Mechanics Ins. Co.
Los Angeles.
Ward, C. H.
Waters, J. N., Special Agent, Sun and Michigan Ins. Co's.
Watt, Rolla V., Manager, Royal and Queen Insurance Companies.
Wayman, W. O., Manager, National, Colonial Fire Underwriters
Ins. Co's.
Webber, J. F. R., Special Agent, Hartford Fire Ins. Co.
Weinmann, Louis, Secretary, Fireman's Fund Insurance Co.
Wellington, Geo. J.
Wendler, Chas. A., Special Agent, Royal and Queen Ins. Co's.
Whelan, W. D., Special Agent, Fireman's Fund Ins. Co.
White, F. G., Special Agent, Fireman's Fund Insurance Company.
Whitmer, A. W., Special Agent, Home F. & M. Insurance Co.
Whitley, N. B., Special Agent, German-American, Phoenix, Ger-
man Alliance and New Hampshire Ins. Co's.
Williams, T. H., Special Agent, German-American, Phoenix and
German Alliance Ins. Co's.
Warner, J. W., Special Agent, California Ins. Co.
Wilson, J. Scott.
Wilson, F. P., State Agent, Continental Ins. Co.
Windus, W. V., Special Agent, Catton, Bell & Co.
Wright, B. D., Special Agent, British-America and Western As-
surance Co's.
Wyper, James, Manager, London and Lancashire Fire Ins. Co.
Young, E. J., Special Agent, North British & Mercantile Ins. Co.
Young, Walter H., Special Agent, Hamburg, Bremen Fire Ins. Co.

ASSOCIATE MEMBERS.

Banner, Geo. H.	Folger, R. S.	Mills, H. F.
Barrett, L. W.	Hackett, William H.	Muir, Andrew R.
Barsotti, Charles	Hougaard, W. F.	Oxley, G. E.
Bishop, Wilson	Lester, Albert M.	Pattison, Fred C.
Burton, A. E.	Lowden, E. Kenneth	Stanbridge, C. H.
Chase, Harvey T.	Ludlow, Geo. W.	Thomas, F. G.
Conley, C.	McAnderson, Jno.	Vanderlip, H. F.
Daniels, A. N.	Magill, F. M.	Wilkinson, C. W.
Dobie, Chas. C.	Mariner, G. S.	Yates, Roy O.

HONORARY MEMBERS.

Bigelow, H. H., Fresno Co., Cal.
 Chard, Thomas S., Chicago, Ill.
 Carpenter, E. W., Roxbury, Mass.
 Carey, Jas. A., San Francisco.
 Cofran, J. W. G., Chicago, Ill.
 Dickson, Robt., New York.
 Donnell, S. M., San Francisco.
 Du Val, W. S., San Francisco.
 Heifner, C. G., Olympia, Wash.
 James, N. T., San Francisco.
 Low, Geo. P., San Francisco.
 Laton, Chas. A., San Francisco.
 Marshall, John, Jr., Chicago, Ill.
 McElhone, F. H., Chicago, Ill.
 McKenzie, Lee, Seattle, Wash.
 Mohrhardt, E. F., San Francisco.
 Morrow, J. H., Los Angeles, Cal.
 Neal, Robt. W., San Francisco.
 Nichols, C. M., San Francisco.
 Parkhurst, H. E. Salt Lake City, Utah.
 Porter, F. H., San Francisco.
 Robertson, Geo. N., San Francisco, Cal.
 Stillman, Alfred, San Francisco.
 Stone, J. C., Portland, Oregon.
 Smith, A. D., Oakland, Cal.
 Thompson, E. L., Portland, Oregon.
 Wilson, D. B., San Francisco.
 Williams, Sylvester G., Denver, Colo.
 Winne, Peter, Denver, Colo.

San Francisco Addresses of the Officers of the
Fire Underwriters' Association of the
Pacific for the year 1907.

A. M. Brown, President.....	108	Front street
John W. Gunn, Vice-President.....	422	California street
Calvert Meade, Secretary and Treasurer....	314	California street
J. P. Moore, Asst. Secretary and Librarian.....		
.....	1416	Merchants Exchange Bldg.
F. B. Kellam, Chairman Executive Committee...	122	Sansome St.
Edward Niles, Editor Knapsack.....	212	Pine street
Association Library Room.....	1416	Merchants Exchange Bldg.

Proceedings

OF THE

Thirty-Second Annual Meeting

OF THE

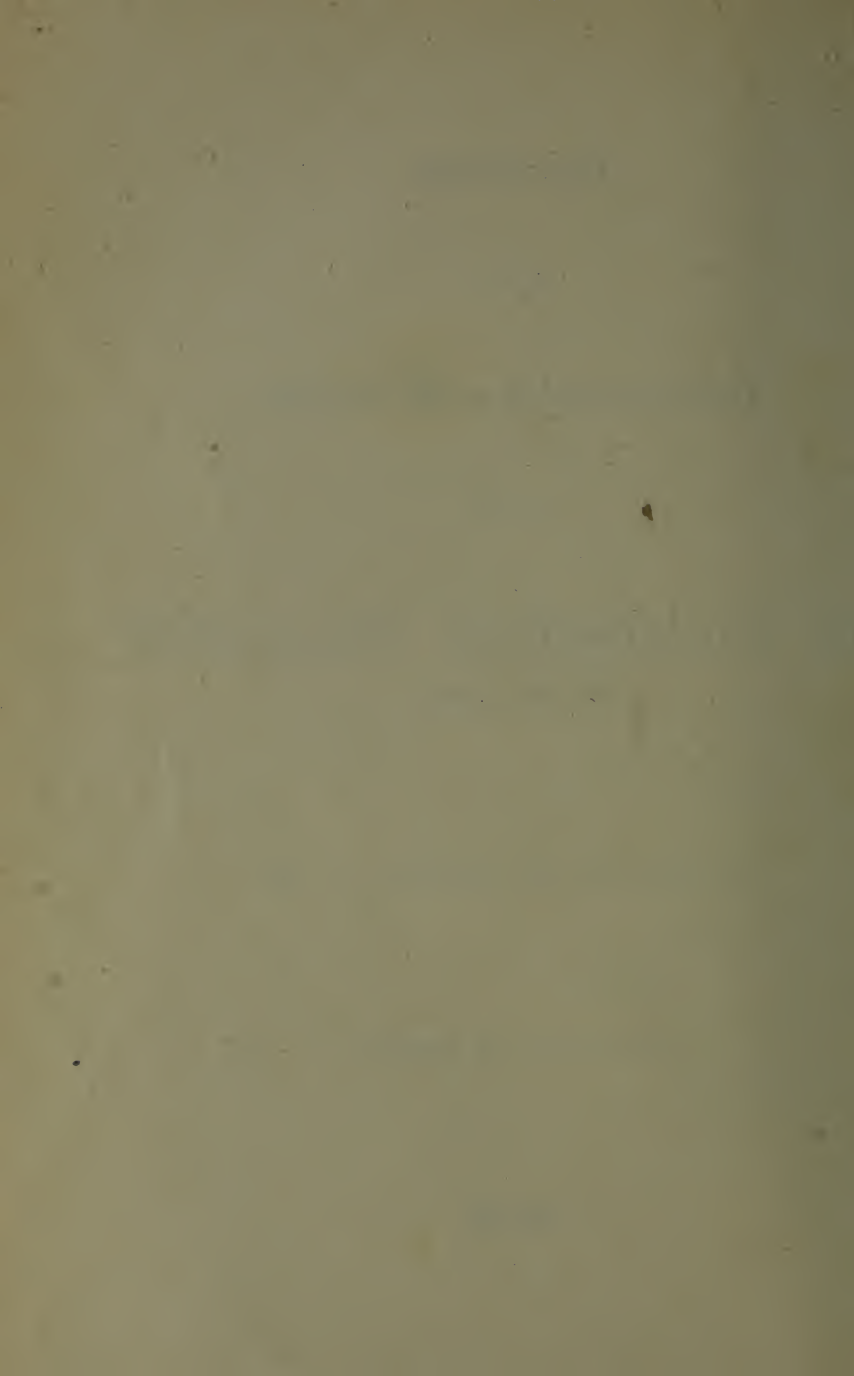
Fire Underwriters' Association

Of the Pacific

SAN FRANCISCO, CAL., JANUARY 14-15, 1908

Printed by Order of the Association

1908



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**FIRE UNDERWRITERS' ASSOCIATION
OF THE PACIFIC**

OFFICERS FOR 1907.

President.....	Arthur M. Brown
Vice-President.....	John W. Gunn
Secretary and Treasurer.....	Calvert Meade
Assistant Secretary and Librarian.....	J. P. Moore

EXECUTIVE COMMITTEE.

F. B. Kellam, Chairman.

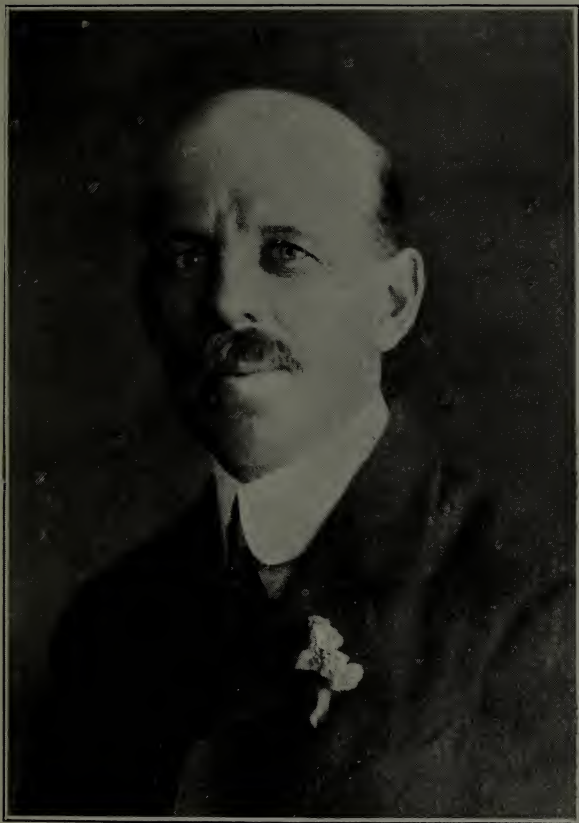
Arthur M. Brown	Herbert Folger
W. H. Gibbons	J. L. Fuller

DINNER COMMITTEE.

George W. Spencer	C. Mason Kinne
-------------------	----------------

CALIFORNIA KNAPSACK.

A. W. Thornton.....	Editor
A. C. Thornton.....	Editor



ARTHUR M. BROWN.

Fire Underwriters' Association of the Pacific

FIRST DAY.

San Francisco, Cal., January 14, 1908.

The following members and guests were present at the Annual Meeting of January 14 and 15, 1908:

F. J. Agnew	Cyrus K. Drew	G. A. R. Heuer
R. T. Archer	Wm. J. Dutton	Rudolph Herold, Jr.
C. H. Anderson	V. Carus Driffield	Dixwell Hewett
Frank Avery	T. W. Duckels	H. P. Hildreth
E. H. Bacon	Grayson Dutton	Harrison Houseworth
H. L. A. Bates	L. B. Edwards	W. B. Hopkins
J. H. Banks	F. W. Elster	Frank L. Hunter
Harry Benner	E. P. Eldred	R. D. Hunter
Arthur M. Brown	R. P. Fabj	A. H. Jackson
Geo. W. Brooks	Bernard Faymonville	W. A. Jackson
W. H. Breeding	Clinton Folger	Bruce Kaltz
H. H. Brown	Herbert Folger	F. B. Kellam
F. M. Branch	W. J. Fortmann	C. Mason Kinne
H. P. Blanchard	John S. French	Wm. M. Klinger
H. R. Burke	T. T. Frith	A. L. Lindsay
J. H. Burgard	Walter A. Frazier	W. H. Lowden
C. H. Burger	E. B. Frick	Leslie H. Lord
E. P. Caine	J. L. Fuller	F. J. H. Manning
J. A. Carey	R. Gallegos	Wm. Maris
A. J. Cartwright	C. D. Gabrielson	H. S. Manheim
Chas. Christensen	P. E. Gerould	G. S. Mariner
F. A. Chapins	A. W. Gies	Wm. Manning
Geo. C. Coddling	W. S. Gill	E. G. Manton
T. C. Coogan	W. H. Gibbons	Chas. McCarth
J. E. Crandall	Adam Gilliland	Lee McKenzie
C. A. Craft	B. Goodwin	Calvert Meade
Geo. A. Crux	H. F. Gordon	R. C. Medcraft
J. F. D. Curtis	W. W. Grove	J. M. Mendell
R. De Lappe	P. H. Griffith	Chas. E. Miller
Clarence de Veuve	Geo. T. Gray	W. L. W. Miller
Geo. E. Devine	John W. Gunn	Wm. O. Morgan
Wm. E. DeJarnatt	Geo. F. Guerrez	J. H. Morrow
Jas. J. Dennis	C. W. Hawxhurst	E. C. Morrison
G. W. Dearborn	A. D. Harrison	E. C. Morgan
Robt. E. Dollard	J. Hunter Harrison	J. A. Murphy
Geo. W. Dornin	Paul M. Henry	Arthur G. Nason
John C. Dornin	C. A. Henry	Hon. Samuel H. Nichols

E. T. Niebling	A. F. Sewell	J. K. Umston
P. de S. Olney	McKee Sherrard	Chas. Van Valkenburg
Prof. Edmond O'Neill	F. G. Smith	J. B. Walden
R. W. Osborn	C. W. Smith	J. W. Warner
Whitney Palache	R. E. Smith	W. O. Wayman
H. E. Parkhurst	W. R. Smedberg	Irwin S. Watson
D. A. Parker	J. V. Spear	J. F. R. Webber
D. W. Pierce	M. E. Spaulding	R. R. Weinmann
W. P. Porep	W. M. Speyer	W. B. Westlake
Chas. Quitzow	Geo. W. Spencer	Geo. J. Wellington
V. H. Quitzow	D. L. Stewart	Louis Weinmann
Jas. R. Quick	Sam. B. Stoy	Welden D. Whelan
W. H. Raymond	F. C. Staniford	C. A. Windler
J. H. Richards	W. G. Taffinder	John Scott Wilson
L. B. Rogers	M. H. Thomson	W. V. Windus
E. A. Rowe	A. W. Thornton	A. W. Wray
R. H. Roundtree	Chas. R. Thompson	Jas. Wyper
Hon. J. H. Schively	F. H. Tower	Frank H. Young
Wm. Schoeneinann	J. B. Trumbull	W. F. Zwick
C. A. Schallenberger	Geo. H. Tyson	

The meeting was called to order at 10 o'clock a. m. by the President of the Association, Arthur M. Brown.

The President: I am delighted to greet so large a number at this opening session of our Thirty-second Annual Meeting. I trust that it is a good augury for the meeting itself and its success.

The first business of the meeting, in regular order, is the reading of the minutes of the last previous Annual Meeting. Unless objection is made, we will dispense with that, and will proceed with the next order of business. Hearing none, it is so ordered, and I will call upon the Secretary and Treasurer, Calvert Meade, for his report for the year.

The Secretary: Mr. President and Gentlemen—My report for the year ending January 13, 1908, both as Secretary and as Treasurer, is as follows:

Through inadvertence the following correspondence was omitted from the proceedings of the Thirty-first Annual Meeting. I desire the members should be informed of the Liverpool and London and Globe Insurance Company's generous donation.

Oakland, Cal., January 17, 1907.

Mr. Calvert Meade, Secretary-Treasurer Fire Underwriters' Association of the Pacific, San Francisco:

Dear Sir—Responding to your appeal for funds for the pur-

pose of rehabilitating the Library of the Fire Underwriters' Association of the Pacific, it gives me pleasure to enclose our check for \$100.

We realize that much benefit to the Insurance Fraternity generally is to be had by a collection of insurance periodicals, technical papers and general literature pertaining to our profession, when properly utilized. We trust you will meet with many satisfactory responses. Yours very truly,

C. MASON KINNE, Assistant Secretary.

San Francisco, Cal., January 26, 1907.

Col. C. Mason Kinne, Assistant Secretary L. & L. & Globe Ins. Co., 406 Eighth street, Oakland, Cal.:

My Dear Colonel—Your much-appreciated donation of one hundred dollars to the Library rehabilitation fund was received by the writer under date of the 17th inst., and I am instructed by, and on behalf of, the Fire Underwriters' Association of the Pacific to extend to you and Mr. Haven its most hearty thanks.

My dear Colonel, you personally have done much in the past to further all interests of our Association, and we all know your heart has ever been and continues to be in full accord with placing our Library on even a better plane of usefulness than heretofore.

Again thanking you and Mr. Haven, I am, very truly yours,
CALVERT MEADE, Secretary.

FIRE UNDERWRITERS' ASSOCIATION OF THE PACIFIC.

Financial Statement.

Receipts.

Balance in Bank of California, Jan. 15, 1907.		\$ 442.72
Received for Annual Dues.....	\$1,165.00	
Received for Assessment, 1906.....	105.00	
Received for Donations—Royal and Queen, \$100; Liverpool & London & Globe, \$100.	200.00	
Received for Initiations	85.00	
Received for Final Propn. Ins.—From Fire- man's Fund	65.00	
Received for Insurance Literature.....	25.00	
Received for Annual Proceedings	2.70	1,647.70
		<hr/>
		\$2,090.42

Disbursements.

Paid stationery, printing and supplies.....	\$ 87.60
Paid subscriptions, books and publications..	133.10

SECRETARY AND TREASURER'S REPORT

Paid deficit annual dinner 1907.....	145.75	
Paid stenographic report	45.80	
Paid unite cases and cards.....	197.67	
Paid Librarian, services and expenses.....	325.55	
Paid Annual Proceedings, 1907.....	330.72	
Paid Annual Proceedings, 1906.....	200.10	
Paid office furniture and fittings.....	22.75	
Paid floral piece	10.00	
Paid postage, telephone, express and delivery	75.25	1,574.29
		<hr/>
Balance in Bank of California.....		516.13
		<hr/>
		\$2,090.42

Insurance Institute.—Financial Statement.

Balance in Bank of California, Jan. 15, 1907.....	\$129.25
Paid for account books, stationery and supplies.....	3.70
	<hr/>

Balance in Bank of California, Jan. 14, 1908.....\$125.55

Audited and approved.

J. L. FULLER.

W. H. GIBBONS.

Active members Jan. 10, 1906.....	265	
Elected during the year 1907.....	26	291
	<hr/>	
Transferred to honorary membership.....	2	
Resigned	34	
Deceased	8	44
	<hr/>	
Total active members Jan. 14, 1908.....		247
Total associate members Jan. 14, 1908.....		27
Total honorary members Jan. 14, 1908.....		31
		<hr/>
Total membership Jan. 14, 1908.....		305

The President: What shall be done, gentlemen, with the report of the Secretary and Treasurer of the Association, just read?

Mr. Gibbons: I move, Mr. President, that it be accepted and ordered placed on file.

The motion was duly seconded and carried unanimously.

The President: Next in order is the report of the Executive Committee. I will call upon Mr. F. B. Kellam, the chairman of the committee, to read the report.

REPORT OF EXECUTIVE COMMITTEE.

Gentlemen—Herewith your committee submits its report for the year 1907.

The accounts of the Secretary and Treasurer for the year just closed have been audited and been found correct. The details of these accounts appear in the report of that officer. The committee takes pleasure in reporting the finances of the Association in good condition, with a balance of \$516.13 in bank, and all indebtedness discharged.

We believe this statement will prove especially gratifying when the progress made in connection with the Library is considered. It will be recalled that at the last meeting the immediate rehabilitation of the Library was urged, and the committee is now able to report that thanks to a number of generous donations of books and money, added to judicious purchasing on the part of the Librarian, an excellent collection of text books and periodicals is now housed in a comfortably furnished room which the Association occupies by courtesy of the Board of Fire Underwriters of the Pacific.

The committee also reports the reconstruction of the Association's Roll of Members, the original, as you are aware, having been destroyed in the conflagration.

The authoritative copy of the Association's By-Laws was also destroyed, and your committee recommends that a new copy be prepared with amendments to date taken from the printed records of the proceedings of the Association, the By-Laws to be thereafter printed and sent to members, and that a committee be appointed for the purpose.

With the re-creation of an insurance center the committee feels the coming year should witness a second session of the Insurance Institute, which was so successful a feature of 1905. It feels sure the same ready response from lecturers and attendants will be forthcoming, and recommends the appointment of a committee to take up the entire subject.

The committee feels that at no distant date the Association must seriously face the question of a proper recompense for the work which should be done by the Secretary and Librarian. This would undoubtedly make necessary an increase in our income, and while the committee cannot recommend an increase in the annual dues, it feels that it should strongly urge an increase in the membership of the Association, and that it become the duty of each member to see that such of his business

friends as are eligible for membership and who are not already on our roll be invited to present their applications.

The committee also feels that through the thoughtlessness of some of the members the duties of the Secretary are made somewhat more burdensome than necessary. The committee refers to the collection of the annual dues of the Association, and the fact that the Secretary's duties may be greatly lightened by the prompt payment thereof. Dues apparently are not paid with the same cheerfulness of spirit as characterizes the members' contributions to the annual dinner. In addition to the present requirements of the By-Laws with regard to delinquent dues, the committee recommends that those members who are delinquent for dues of the previous year be denied the privilege of attending the annual dinner of the Association.

You will recall that at the last annual meeting notice was given that at this meeting there would be presented for action an amendment to the By-Laws providing for a nominating committee, whose duties should be to present to the meeting nominations for officers for the ensuing year. This amendment will be presented in due course, and your committee asks early action thereon in order that, should the amendment be carried, the present meeting may receive the benefits it is hoped that a canvass of the field by such a nominating committee will result in.

Respectfully submitted,

F. B. KELLAM, Chairman:
HERBERT FOLGER.
J. L. FULLER.

The President: Gentlemen, the report of the Executive Committee, among other features, brings forth two which require attention at this time, the first being the suggestion that a committee be appointed to further the interests of the Insurance Institute. Are you prepared at this time to take up that question? If so, the President would like to have suggestions upon it.

Mr. Kellam: Mr. President, the first session under the Insurance Institute was undertaken with considerable diffidence by the committee. But we had not gone very far before we saw that our first idea, that there might be a dearth of attendance at the Institute, a dearth of pupils, so to speak, was entirely wrong.

At one or two of the more popular lectures, the trouble was not a dearth of attendance, but a shortness of room to accommodate those present. The whole session of the Institute was very successful. And, now that the insurance offices are again congregated about one center, the Executive Committee feels that a session of the Institute can very well be undertaken. It feels, further, that while it might perhaps be an imposition to ask some of the same lecturers to again favor us, that there are others in the business well posted on some of the subjects involved within the scope of the Institute and who will be very glad to offer their services. In fact, we now know of several who will do so. The committee feels that if it is the sense of the meeting that that be taken up, and the President will appoint a committee, you will find that there are very many members of the Association ready to assist that committee and to make the entire session of the Institute a pronounced success.

Mr. Weinmann: I move, Mr. President, that a committee of three be appointed by the chair for the purpose indicated by Mr. Kellam in his remarks.

The Secretary: I second the motion.

The President: Gentlemen, the success of the Institute before was so marked that this motion looking to its continuance should certainly prevail. Moreover, I feel that that success was very largely due to the efforts of the previous committee. What is your pleasure with reference to this motion?

The motion unanimously prevailed.

The President: As I said a moment ago, the committee for the previous Institute was largely responsible for its success, and we surely cannot do better than to reappoint the same committee, if the gentlemen who were upon it will serve the Association in that capacity again. I shall, therefore, reappoint that committee, unless some suggestion is made in that connection to the contrary.

Mr. Kellam: I move to amend Mr. Weinmann's motion, or rather, since it has now been passed, I move that the number of

the committee be increased and that it consist of five instead of three.

Mr. Weinmann: I will accept that as in the nature of an amendment, and second the motion.

The motion carried unanimously.

The President: During the session the chair will appoint a committee for the Institute.

The next question in the Executive Committee's report which deserves our special attention at this moment is that relative to the collection of dues, and the suggestion that members who are not in good standing be denied the privilege of attendance at the annual dinner. The work of collecting the dues has been a great deal more onerous, perhaps, than most of us understand. The Secretary has devoted much time and attention to it, indeed, much unnecessary time and attention. And I am very sorry to say that it does seem necessary to adopt some drastic measure regarding these collections. The President would therefore like to hear suggestions from the members as to that point made in the report, of denying the privileges of the dinner to those who are not in good standing at the conclusion of our session to-morrow. I would like to hear some expression of either approval or disapproval.

The Secretary: Mr. President, as none of the members seem to be ready with a suggestion, and as I am the troublesome one, I move such a rule be adopted.

The motion was duly seconded.

The President: Are there any remarks to be made upon the subject before the motion is put? I should like to hear from any one of you.

The motion passed unanimously.

The President: Gentlemen, it was formerly customary at the meetings of the Association to read the names of those delinquent in the payment of dues. For the last three or four years that custom has not been observed. But it seems necessary to bring it up again. If there is no objection, the Secretary

will now read the list of those who are delinquent in their dues, in order that they may give some attention to it, or that the Association may. It was customary in years past for certain members who were acquainted with the whereabouts and had knowledge of the financial circumstances of the gentlemen whose dues were not paid to offer some explanation, and in some cases to pay the dues. The object of this reading of the list is more for the purpose of getting information and getting the matters straightened up in that way, than any other. We hope that all of these delinquent dues may be wiped out before the session closes.

Mr. Gunn: Mr. President, I do not wish it understood that my dues are not paid, but I think it might be advisable not to read the list without a minute's notice. Suppose that, instead of reading it now, you give notice that you will read the list to-morrow morning, and give the boys a chance to pay their dues in the meantime. Some of them may be a little bit sensitive upon the point. It may have been neglect, and it may possibly be mistake upon their part. I think it would be better to wait until to-morrow.

The President: Gentlemen, Mr. Gunn's suggestion strikes the President most favorably, and unless I hear some objection the reading of the names of delinquents will be held over until to-morrow morning at the opening of the session.

The next in order is the election of new members of the Association. I believe the Secretary has some names to present to you of persons eligible and who have the requisite recommendations, and I will ask him to read them.

The Secretary: There have been presented for membership in the Fire Underwriters' Association of the Pacific, Mr. President, the names of the following gentlemen:

Mr. Paul M. Henry, special agent of the North British & Mercantile Insurance Company.

Mr. H. C. Koempel, independent adjuster.

Mr. A. J. Cartwright, special agent of the American Insurance Company of Newark.

Mr. Frederick H. Elster, special agent of the New York Underwriters.

Mr. A. H. Jackson, special agent of the American Insurance Company of Newark.

Mr. Frank H. Young, special agent of the Springfield Fire and Marine Insurance Company.

Mr. Frank W. Avery, general agent of the Fire Association.

Mr. G. W. Dearborn, special agent of the National Fire Insurance Company.

Mr. W. B. Westlake, special agent with Edward Brown & Sons.

Mr. C. M. Miall of C. J. Stovel's office.

Mr. Roderick E. Smith, special agent of the Niagara Insurance Company of London.

Mr. C. W. Hawxhurst, special agent of the New Zealand Insurance Company.

Mr. G. S. Mariner, special agent of the Norwich-Union Fire Insurance Company.

Mr. J. J. Kenny, manager Western Assurance Company.

Mr. H. P. Hildreth, special agent British America and Western Assurance Company.

Mr. C. H. Burger of the Western Assurance Company.

Mr. E. P. Caine of McNear & Wayman's Agency.

Mr. F. J. Schoenemann, special agent of the North British and Mercantile Insurance Company.

Mr. T. W. Duckels, special agent with Edward Brown & Sons.

Mr. E. A. Rowe, special agent of the National Fire Insurance Company.

Mr. Charles Quitzow, special agent of the Home Insurance Company of New York.

Mr. Frank H. Tower, independent adjuster.

Mr. R. T. Archer, independent adjuster.

Mr. J. C. Johnston, associate general agent of the Insurance Company of North America.

Mr. E. Grenville Manton, special agent of the Law Union and Crown.

Mr. I. S. Watson, special agent, Christensen & Goodwin Agency.

The President: It has been customary, gentlemen, to suspend the rules and have the Secretary cast the ballot of the Association for new members proposed at the Annual Meeting. What is your pleasure with reference to the gentlemen whose names have just been read as candidates for membership in the Association?

Mr. Weinmann: I move that the Secretary cast the ballot of the Association in favor of the gentlemen whose names have just been read.

The motion was duly seconded and unanimously carried, and, upon the Secretary announcing that the ballot had so been cast, the President declared that each and all of the gentlemen named were duly elected members of the Association.

The President: A year since this Association approved an amendment to the By-Laws that a Nominating Committee should be by the President appointed each year, for the nomination of officers for the coming year. The chair would like to have a motion authorizing him to appoint this committee at this time.

Mr. Kellam: Mr. President, that amendment was not adopted last year. Under the Constitution notice of it was given at the last meeting, and it was thereupon laid over to this meeting for consideration. It therefore comes up for consideration at the present meeting. But until the amendment is adopted a committee cannot very well be appointed.

The President: The chair stands corrected. If there is no objection, we will now consider the question of the adoption of such an amendment.

Mr. Gibbons: The amendment as offered last year is as follows, Mr. President:

"It shall be the duty of the President, on the first day of each annual session, to appoint a committee consisting of five Past Presidents to nominate the officers and Executive Committee for the ensuing year, and the committee shall present its

report on the second day of the annual session under the order of 'Election of Officers.' "

Mr. Gunn: Mr. President, I move the adoption of the constitutional amendment as read.

The Secretary: I second the motion.

The President: Does any member of the Association desire to offer any suggestions upon the question?

The motion was put and the amendment was unanimously adopted.

The President: Are there any reports of special committees, or any further business of which you are now aware, Mr. Secretary?

The Secretary: None that I know of, Mr. President.

The President: There being no unfinished business, the next in order will be the President's address, and I will ask Mr. Gunn to kindly take the chair during its reading.

Vice President John W. Gunn then assumed the chair.

PRESIDENT BROWN'S ADDRESS

Gentlemen of the Fire Underwriters' Association of the Pacific:

When you did me the honor, a year since, of election to the high position of President of this Association, I had no idea that within the year of such incumbency would come opportunity for what I had dreamed of all my life, a lengthy trip to Europe. Had I known that this opportunity would arrive, should have deemed it my duty to you to regretfully decline the nomination, for a European trip lasting until well into the holidays is hardly in consonance with the duties of your President, being too absorbing to permit of even fleeting thoughts in any other direction. When the opportunity came, however, it was altogether too good to lose, and if I have failed in any of the details of duties surrounding the office of President of this Association, trust that you will overlook these delinquencies in the knowledge that when similar opportunity comes to you, it will, undoubtedly, be taken advantage of, no matter what the contingencies. Under all these circumstances it can hardly be expected that your President would be able to get together the data and information necessary for the usual address, and I shall, therefore, take the liberty of departing radically from former customs and of confining this ad-

dress almost entirely to one subject, in the hope that it will be of interest.

Before proceeding with the general scope of the address, I desire to express my appreciation, as President and personally, to the members and friends of the Association who have given their time and thoughts to the general benefit and interests of this meeting. Many were called upon at almost the eleventh hour, and their willing and interesting responses at that late time speak volumes for the general esteem in which this Association is held. Especially should the Association be grateful to the Messrs. Thornton. It was not until after December 1st that we learned that Mr. Niles would not be able to continue his long-time editorship of the "Knapsack," and their ready acquiescence to a request that they take up the duties of this difficult and time-absorbing position should be decidedly pleasing to all. That your Executive Committee made no mistake in their selection will, undoubtedly, be evidenced before the meeting closes.

For the past five or six years the addresses of the various Presidents of this Association have been confined, largely, to the necessities and advantages of liberal education in all fields, lines and details of the fire insurance business. The ideas presented at these times have been gathered after much time and research, and the seed thus sown has borne abundant harvest, but, having been absent during the time usually devoted to this work, it is not possible for this address to be along concurrent lines. Anyone, however, who travels with his eyes and mouth open can observe new features and gather new ideas, and I believe you would be interested in hearing some of the details of observations abroad.

The average American tourist on his return from his first trip to Europe is so full of the wonders and delights it has been his pleasure to witness that he is apt to become a tiresome bore to his friends and associates. It is, therefore, with a feeling of some hesitation that I approach the subject of

"OBSERVATIONS IN CONTINENTAL EUROPE FROM AN INSURANCE STANDPOINT,"

and beg, if you believe later that I have said too much, you will feel that it is not from a desire to exploit personal experiences, but with the sincere idea that knowledge of European construction and general methods gives a more thorough insight into the generally crude, conflagration-inviting and unstable methods adopted in American cities than can be obtained from months or years of reading and research.

European underwriters, almost to a man, on their first visit to America exclaim with horror over the faults of American construction, and lay especial stress on our almost criminal carelessness and general lack of interest in preservation of public and private property. Later when they have looked into the wonders of our fire-fighting facilities they are apt to modify their views, but, with due respect to these modifications, until an American has visited and inspected with a critical eye their European cities he is inclined to carp at their criticisms. After such visit, however, these reproaches do not appear to be even extravagant.

It is seemingly a far cry from road construction to details of insurance inspection, and yet I cannot more thoroughly illustrate the solidity and time-defying methods of European construction generally than by citing the building of the Great Highway between Italy and Germany. This road (commenced in the twelfth century) passes through the mountains, gorges and defiles of the Tyrolean Alps, from sea level to about four thousand feet altitude, and through a country which offered as severe engineering difficulties as would a similar road over the passes of the Sierra Nevada Mountains. So old is it that the protecting stone coping walls on the outside of the grades are in some places crumbling from the effects of time and the elements. The road follows, for the greater part, the windings of the rapid running rivers, and, in several instances, is built up to a height of one hundred feet or more above the water. The work of this building is for all time, of solid stone and masonry, and all the gorges and canyon ends are crossed on stone-arched bridges. It has never been necessary in all these centuries to replace even one of these walls or bridges, and the road itself, averaging over sixty feet in width the entire distance, is to-day as perfect, hard and smooth as a reinforced concrete basement floor, shows no signs of wear and is so perfectly built and cared for that even at the times of torrential mountain rains there are no depressions sufficient to hold even the smallest quantity of water. This road is a thorough example of the methods of building for all time, of the general care exercised and of the thorough honesty of construction which characterizes not only the roads but the buildings throughout the whole of Europe. There is a story told in Florence, Italy (I do not vouch for its authenticity), that at the time the Italian architects and builders came to California to complete the mosaic work on the Leland Stanford, Jr., Memorial Temple the leading architect told Mrs. Stanford that

the entire lower story should be reconstructed, that as built and with the extra weight of the mosaics above it would not last a hundred years, to which Mrs. Stanford replied, in a thoroughly characteristic American manner, that that would be long beyond her time, and to proceed with the work. The result when the earthquake of 1906 occurred you all know of. The Italian who told this story stated that in his country not even the humblest stone building was erected unless its construction would guarantee over one hundred years of existence, and after going through the small houses in the humbler villages I can readily vouch for the correctness of this statement. A little hotel in the northern part of Italy, in a town not larger than San Leandro, had outside walls thirty-six inches thick, stone floors, vaulted ceilings, stone staircases and a kitchen built like a vault, and, although over four hundred years old, was in almost perfect condition. In another hotel, in the same country, of almost similar construction, the partition walls between the halls and bedrooms were of stone twenty-two inches thick, and in the same village one of the humbler dwellings had outside walls four feet thick and not a piece of wood in the entire building, except door and window frames. These are not notable exceptions, but are characteristic of the construction throughout the entire country. When it is borne in mind that the stone dwelling in which Titian, the artist, was born, in 1477, is still occupied and forms a comfortable residence for its tenants, some idea can be had of the manner in which buildings were and are erected in those countries.

On first going into the average large European city, with its labyrinth of narrow, winding streets and its apparent lack of fire-fighting facilities, the American underwriter is inclined to wonder how these cities have escaped most disastrous conflagrations, but a closer inspection answers the question. In the City of Dresden, Germany, for instance, there is hardly a street in the old business section over fifty feet in width, many of the buildings are four or five stories in height, with unprotected openings, front and rear, and have, necessarily, all classes of occupants, but there is not a wooden stairway in that entire section, no frame partitions, no wooden balconies, nor rear attachments. The law prevents the cutting of openings between buildings, effectually preventing conflagration breeders, and there is not a wooden floor in the entire section but is laid on stone or concrete. There are no patent chimneys, no terra cotta flues, no stovepipes, no oil stoves, no gas grates, no gasoline lamps

or stoves, practically no elevators nor well holes, and absolutely no open electrical wiring. Municipal government demands most rigorous observance of the building laws, not only when the building is being constructed, but for all time after, and "Care, Care, Care" is the watchword. Every member of the Police Department is municipal inspector, and every scrap of paper, every bit of box or crate, is required to be at once placed in iron or stone receptacles. If you drop or throw an empty envelope or a piece of paper on the street you are politely but firmly requested by an ever-present policeman to pick it up and properly dispose of it, and a back yard or court cluttered and filled up with rubbish, so common in our American cities, is absolutely unknown, in fact under their municipal surveillance could not exist. Every large store employs in its shipping department boys who do nothing else but clean up, and failure to keep these departments in proper order would result in, immediate arrest, with consequent certain punishment. Nor is this construction confined to the business section. The apartment in which I lived was a four-story building in semi-detached section of the city. The stairways of stone were in a separate stone shaft, outside of the main building; the wooden floors were laid on concrete and the partitions between the rooms were of stone and not less than fifteen inches thick, and this is characteristic of the entire dwelling house construction throughout all Europe. In the cities of Sweden no dwelling house even is permitted to have wooden staircase, and the cost of dwelling construction in the larger cities is, under the municipal requirements, so expensive that only the wealthiest can afford separate houses, the greater proportion of town inhabitants living in four or five-story apartment houses.

It is true that there have been, during the past ten years, disastrous fires in some of the European cities. Not, however, in the towns nor the smaller cities (and by that I mean cities of less than 400,000 population), but in the larger cities where the old-fashioned methods of better buildings, double-size walls and stone staircases are giving way to the more modern ideas of lighter construction, large areas, elevator shafts and other attendant fire evils. Except in the warehouse districts, however, these cities have had remarkable immunity from disastrous fires, but I hazard the statement that there is great possibility of fires which will astound the world in London, Paris, Hamburg or Berlin, where immense department stores and hotels of lighter construction are coming into existence in the heart of the busi-

ness sections, and where the fire-fighting facilities are, from our standpoint, entirely inadequate.

In the United States, of late years, one of the greatest sources of danger has been electric wiring, wiring put in by almost anyone who had the slightest rudimentary knowledge of the business; wiring strung without reference to voltage, wiring improperly insulated and wiring which is absolutely dishonest, and we have not yet begun to pay the penalty of this utter inattention to improper workmanship and crude methods. In European cities electricity is not the feature of lighting which characterizes our cities, gas being used much more extensively than with us, but in the more modern cities it is rapidly taking the place of other methods. The wiring is done under municipal supervision, under modern methods and in accordance with arrangements which are rigidly enforced. There is absolutely no open wiring. Even in the dwelling houses using incandescent lights only every inch of the wiring is in conduits. These conduits are not built in unapproachable and concealed portions of the buildings, but are carried in plain sight through the hallways and rooms. They do not add to the beauties of the interior, but, on the other hand, are in full accord with characteristic European ideas of using every possible safeguard to prevent destruction of property or loss of life. All of the street wiring is under the conduit system, and transformers, where used, are, by law, placed in brick or iron receptacles at the edge of the sidewalks.

From an American standpoint the fire-fighting facilities in European cities are entirely inadequate. Unfortunately, I did not have an opportunity of looking into the London department, which has the name of being modern, but after seeing those in the larger German and French cities I was filled with even more admiration for the construction and fire records. The engines are antiquated, apparently insufficient in number; the other apparatus is not at all up to date, and the methods of fighting fire are peculiar, to say the least. In one of the larger German cities I saw the department respond to a good-sized mercantile fire. The apparatus approached at a dignified trot, and after it had all arrived the companies drew up in military line and gravely saluted the captain, who responded with a flourish of the short sword which he wears. After he had given a few orders the engines took their respective hydrant stations, the hose was laid and the firemen again gave military salute, with responsive sword waving. They then took up their duties of ex-

tinguishing the fire. It was put out in comparatively short time thereafter, but the extinguishment was merely another tribute to construction.

The position of special agent in Continental Europe is radically different from anything we know of on this Coast; in fact, anywhere in America, except in New York, where a few companies are now adopting European ideas in this respect. Every special is required to be a trained engineer, familiar with all details of construction and operation of all classes, from dwellings to manufacturing plants. His duties are practically those of inspection only, and he is recognized as an official of a profession. Special agents do make **recommendations** of employment of agents, but these recommendations are not final until submitted to and passed upon by the head office. He would consider it beneath his position to assist agents in soliciting business, and is much looked up to and his judgment accepted beyond question by the local. Some of the larger companies in this country are now employing men of collegiate and engineering training, whose duties are confined to inspection of towns from construction, water supply and fire department standpoints, and in these days of specialization a new field will undoubtedly be developed for the man with special training along these lines. The local agent in Europe is also required to be a man of position in his location, and his appointment under the method above mentioned is the subject of much consideration. Such appointment is much sought for and is looked upon as being a life position. The local agent is required to follow to the letter the instructions and rulings of the company; the slightest deviation therefrom is rigidly looked into, and if repeated is the cause of dismissal.

As before stated, these details have not been given as merely personal observations, but with the idea of pointing out to you how seriously we are behind in all that goes to make up public and personal safety in the construction of our cities, and in the hope that you will perhaps realize the necessity of our doing our part toward demanding that our building laws shall not only be improved but more rigidly enforced, that honest construction shall be insisted upon, and that the great crime of American municipalities, viz., recklessness and carelessness, shall be done away with as much as is possible. Here let us do tribute to the recently enacted requirements of the City of Seattle, whereby only such buildings as are fireproof as modern ideas can make them are to be permitted within a very important section.

The enactment of this law is a monument to the foresight and wisdom of Seattle's municipal government, and every effort should be brought to bear to procure similar enactments throughout the length and breadth of this land. Property owners should be shown that the only hope of checking the fire waste in the United States is by modern, fireproof construction, and our rating schedule should be so simplified and so arranged that the average layman can understand at a glance the benefits to be derived not only by improved construction, and by insisting that his city's water supply and Fire Department shall be up to standard, but by further improvements in inferior buildings now existing.

CO-INSURANCE.

The basis of all rating throughout the Continent of Europe is on one hundred per cent insurance to value with heavy charges for less amounts, and in the United States generally co-insurance is considered by companies as one of the absolute requirements for safe underwriting. In this most important feature the Pacific Coast is lamentably behind the balance of the United States, and complaints are made, both by property owners and company officials, that our rating schedules do not give sufficient scope to allowances for co-insurance to warrant its rapid extension. There is before the Board of Underwriters, at the present time, a modern rating schedule, which makes an especial feature of co-insurance allowances, or rather to penalties for failure to carry sufficient insurance, and it is to be trusted that this schedule will receive the heartiest support of the members of this Association. This is necessary if we are to maintain our claim for modern underwriting.

CAUSES OF FIRES.

That hoary-headed old sinner, "Cause Unknown," who has been the bane of managing underwriters and the relief of incompetent adjusters for many years past, is now bringing up a daughter, by the name of "Supposed from Defective Electric Wiring," whose proportions for her years are abnormal. If her growth has been proper, then it is certainly evident that it will be to the interests of this Association and every other underwriting body that means should be taken immediately to prevent enormous proportions, and I feel that we cannot do better work in this respect than by assisting in the re-formation of the Insurance Institute, even if that body takes up but the one subject. Some of us have individual knowledge to enable us to make satisfactory electrical inspections, but it certainly behoves this Association that every member should have specific

and full knowledge of the subject, with the ultimate end in view of preventing carelessness and dishonest methods of wiring, current overloading and all the evils which are possible in this great portion of our work. On this Coast, with the development of water power the use of electricity for every purpose, from cooling and heating to furnishing power for immense establishments, is making rapid strides, and we should be and must be in position to have thorough knowledge of electricity from all standpoints if we are to successfully combat the dangers of improperly installed electrical work.

OFFICE OF SECRETARY.

At this meeting recommendation will probably be made looking to an amalgamation with this Association of the Life, Accident and Marine Associations, and favorable consideration of this recommendation appears necessary if we are to be able to properly compensate the Secretary and his assistant and carry on the work of thoroughly rehabilitating the library. The duties of the Secretary are much more onerous than is generally understood, too onerous for anyone engaged in other duties, but it does not seem possible for this Association to provide for proper employment and compensation unless such amalgamation can be consistently arranged.

While the Association has increased in membership during the year, it has lost, by death, no less than six of its staunchest supporters, three of whom had been long in the ranks, and three just approaching the honors resultant on hard work and ability. In March of last year J. E. Strader and Charles E. Ecklin (two of the rising men in the business) passed away, being cut off in the prime of life. William Frank, well known to you as one of the oldest and best respected men in the business, died on June 7th, and on June 19th R. H. Naughton—or, as he was known to us all, "Dear Old Harry Naughton"—was taken away. In the next month, July, Mr. George D. Dornin, one of the foundation stones of this Association, ended a long and well-lived life, and I deem it only right, and with no lack of respect to the others who have gone beyond, that I particularly mention Mr. Dornin. With a particularly sweet disposition and with a mind clear and bright to the last day, he was the friend and guidance of every one in this Association; be his time ever so valuable, he could always find moments for the consideration of others, and no one, whatever his troubles, left Mr. Dornin's presence without feeling better and more cheerful. On December 20th died genial Fred Stover, undoubtedly one of the best and foremost of the younger

men of our profession, whose taking away was as untimely as it seemed unnecessary.

Now that we have overcome, to a great extent, the effects of the terrible catastrophe of 1906, and have been able to settle down in our own respective places, the opportunity seems to be given and the time to be ripe for furthering the interests of this Association and of making it not one of annual observance only but of continual benefit to the members. Similar associations throughout the United States, having their meetings at various times of the year, prepare, as do we, full copies of their proceedings; at these meetings much that is interesting and something that is new is always presented, and I believe that the members of this Association would receive much benefit could these copies of proceedings be placed in our hands, not in the library, but to each member individually. The cost to each would be but trifling, and the result good. Confucius says "By nature we approximate; it is only experience that drives us apart," and we can all certainly benefit by the experience of others working in fields of wider scope and greater variety than ours. I trust, therefore, that the Executive Committee may be able to formulate some plan along these lines, and that you will lend your hearty co-operation thereto.

To many of you who have, during the past year, been at work in distant fields, the results of the wonderful labors expended in rebuilding and improving the City of San Francisco must appeal as a wonderful monument to man's energy and skill, and must bring a song of praise and uplifting of mental and physical capacities. This Association, closely linked as it is with San Francisco, must give due heed to the lessons learned from last year's work in its example of courage and unflinching trust, and we can go forth with renewed energy.

"Live and love
And the bright sky o'er us,
And God take care
Of the world before us."

Gentlemen, I thank you. (Applause.)

President Brown then assumed the chair.

The President: The first of the papers upon the program for this meeting was written by a man who has been long associated in our business, but who has now been so fortunate as to turn his mind in other directions. I will ask Mr. Gibbons

to read a paper entitled "Some of the Advantages Afforded a Special Agent," by Mr. James C. Cunningham of Spokane, Washington.

SOME OF THE ADVANTAGES AFFORDED THE SPECIAL AGENT.

Jas. C. Cunningham.

That business, or occupation, which affords the widest range and the greatest opportunity for the exercise and cultivation of the mental, moral and intellectual faculties should be most appreciated by every honest and ambitious young man.

FIRE INSURANCE.

It will be conceded that any business which affords such opportunities and advantages must be classed as an honorable and representative one. I am firmly of the opinion that the business of fire insurance is entitled to take high rank in such a distinguished classification; that it is representative and almost stupendous in its operation is well known to nearly every one possessed of ordinary intelligence. That it is honorable and beneficent is attested by the fact that it has saved thousands of individuals, estates and corporations from ignominious failure and bankruptcy. It stimulates commerce and strengthens the finances of municipalities, states and nations. It has always been the ever-present friend indeed in time of dire distress and greatest need, occasioned by the ravages of the fire fiend. Should not the beneficiaries of such a business (and their names are legion) rise up and call it blessed. For such is the nature and functions of the business of fire insurance to-day, in which are engaged some of the strongest, brightest and most active intellects.

THE SPECIAL AGENT.

In the various and important branches of the business, that of the Special Agent forms an integral part.

It is not my purpose to be considered didactical in presenting this subject, but rather to simply state briefly some of the observations of the writer concerning the opportunities and advantages afforded the Special Agent and Adjuster in the discharge of his regular duties. If the same are honestly and intelligently performed, they inculcate honesty, sobriety, perseverance, loyalty, obedience, accuracy, punctuality, self-reliance, positive decision, originality, discretion, and last but not least, a careful and intelligent observation. Probably in no other busi-

ness is the old adage "Honesty is the best policy" more clearly demonstrated than in the business of the Special Agent. He cannot long retain his position if he practices the slightest deception or duplicity with his agent or his principal. He must be honest and frank with both if he expects to win permanent success. The very nature of the business makes it almost positively certain that in case of a transgression of any of the canons of the business that "his sins will find him out," and afflict him with all the attendant penalties which are not calculated to make the way of the transgressor any smoother.

If I am permitted, in this connection, to make a personal reference, will say that I am pleased to state, and may it be said to the everlasting credit of the men charged with the responsibility of directing the affairs of the companies, as general agents and managers, that during my service covering a period of nearly twenty years as local and special agent and adjuster, which I esteem an inestimable privilege, that I never received any intimation, either oral or written, direct or indirect, that could in any way be construed as permission for an infraction of any of the established rules or regulations of the business, but, on the contrary, always received instructions specific, direct and definite that any violation of the rules of common honesty and integrity would not be tolerated.

MUST BE TEMPERATE, INDUSTRIOUS AND LOYAL.

The successful special agent must be temperate, industrious and loyal. He must be accurate and obedient. These rules apply to the local as well as the special agent. If the special agent has been fortunate enough to have had an early training and successful experience as a local agent, he will have learned from one of his first experiences that he was required to be accurate.

MUST BE ACCURATE.

First he was required to exercise great care in writing his policy, and which, if correctly written, must have stated in exact terms the consideration, amount, date, term and description and location of the risk; the term of the risk being fixed by stating that it began on a certain day at twelve o'clock noon and expired on a day, certain and fixed, at twelve o'clock noon, leaving no possible chance for doubt or dispute, as to the beginning and termination of the contract. In the making of his daily report he must have been further impressed with the necessity for accuracy. He was required to make an exact copy or duplicate, not a brief or summary, of the written portion of the policy,

and in case the risk had not been mapped by the map company, he was required to make a comprehensive diagram of the risk, showing its class, occupancy and dimensions, and the distance to exposures and the class and occupancy of same; the distances and dimensions not guessed at or approximated, but accurately measured, and drawn to a scale. In addition to this, he was required to answer several pertinent questions concerning the assured, his business and the risk insured.

While the special agent is required to perform a great many duties not required of the local agent, yet he should be able, at all times, if necessary, to perform any and all of the duties required of the local agent.

MUST OBEY INSTRUCTIONS.

Obedience is one of the cardinal virtues of the insurance business. The special agent, above all else, is required to obey instructions of his principals, especially when the cancellation of a policy is requested, the invariable rule of all offices being to cancel the policy immediately when directed, and talk afterward. Failure to comply with such instructions may result very disastrously for the special or local agent. The habit thus forced upon the special agent of promptly obeying instructions from his superior is one of the most useful lessons that can be acquired by any young man. It is one of the prerequisites of his future success.

SPECIAL AGENT'S RESPONSIBILITIES.

The special agent in the regular discharge of his daily duties must be constantly impressed with the idea that he is charged with very grave responsibilities. He is entrusted with the good name and reputation of his principals and the companies which they represent, and may I not say that their success or failure is very largely dependent upon the man in the field. He is their ambassador and minister plenipotentiary. He is clothed with full authority to represent his principals in person and in fact. To him is referred all important questions concerning the conduct of the business in his field, and his decision is usually final. He is employed for that purpose.

MUST BE JUDGE OF HUMAN NATURE, POSITIVE AND DISCREET.

To be able to perform this duty acceptably, with credit alike to his superiors and himself, he must be a good judge of human nature, as well as an expert in determining the true value of insurable property. He must be self-reliant and act upon his own

initiative. He must be punctual, positive and discreet; all of which is acquired largely through observation.

MUST BE OBSERVANT.

He cannot hope to succeed unless he is a close observer. It is through this channel that he acquires most of the information which he requires in the conduct of his business. It is his shield and buckler in times of emergency. A brief reference to some of the ordinary, and I may say, regular duties performed by the special agent and adjuster, may serve to call to your mind the various ways in which the special agent is compelled to practice many of the virtues to which I have already alluded.

VISITING LOCAL AGENT; MAKING TOWN REPORTS.

The visiting of a local agent and the necessary reports of same, together with the town report, if intelligently prepared, affords the special agent an almost unparalleled opportunity for increasing his fund of information.

The special agent is expected to visit the local representatives as frequently as possible in order to keep in close touch with the local conditions in the field. He is required when visiting a local agent to report the agent's full name, and where the agency is represented by a firm, to give particulars regarding each member, with full name of each. The agent's nationality, occupation other than insurance, financial standing, insurance experience, special characteristics, special business connections, names of other companies in the agency, whether any of them occupy a preferential position in the agency, and if so, why; to carefully check his accounts, inspect his records, make an inventory of the blank policies and certificates on hand; make a careful personal inspection and report of every risk in which his company is interested; time spent at agency, amount of new business secured, amount collected and amount due.

TOWN REPORT AND INSPECTION.

Then follows the town report with definite location of the same, population, altitude, direction of the prevailing wind and general climatic conditions, whether the townsite is level or rough and precipitous, the staple industry and resource, whether in a prosperous condition or not; proportion of frame buildings, width of streets, height of buildings; whether buildings are generally detached or congested, and the probability of a general conflagration; water supply, equipment of fire department, whether fires have been frequent and extensive or recent years; the re-

port usually closing with a general report on the moral and physical condition of the town, stating whether the town is wide open and riotous or orderly and law-abiding, etc., etc. When it is recalled that the special agent is required to secure and report such definite information, not only concerning one or two towns, but of every town in his territory, which frequently comprehends several states and territories and a considerable portion of Canada, and that the inspections and reports are required at least once each year, can it be doubted that the special agent of even average ability must necessarily have acquired through observation and experience a great deal of information that he could not have acquired in any other line of business.

ADJUSTMENT OF LOSSES.

In addition to the duties which I have already named, the special agent is frequently required to perform the duty of an adjuster. Probably the performance of no other duty by the special agent requires more accuracy and general information, and a greater knowledge of human nature, than the adjustment of a fire loss. Volumes have been written concerning this all-important subject, and yet it is from personal experience and observation gained through long years of conscientious, honest work that the special agent and adjuster acquires the information most needed in the discharge of this very important duty.

If the claim is for the loss of a building destroyed by fire, the special agent and adjuster should be able after ascertaining the nature of the construction and occupancy and age of same, to determine quite definitely as to the actual cash value of the building insured immediately preceding the fire. In order to do this he must know how to estimate the cost of replacing the building and also to determine the proper amount of depreciation to be deducted.

If the claim is for the loss of a stock of merchandise, it is usually necessary to determine the amount of the loss from the merchant's invoices and books of account. The proper adjustment of such a loss requires the active employment of practically all of the general information and experience which the special agent has gained, together with a thorough and practical knowledge of bookkeeping, especially if the accounts are found to have been improperly kept or intentionally juggled, which, I am sorry to say, is quite frequently the case. While the methods employed by different adjusters in the adjustment of a book loss may differ quite widely, yet there must be no difference in the results obtained. They must be accurate. The result of the adjustment of a book loss frequently discloses some very startling

facts, the knowledge of which may prove very beneficial, not only to the claimant, but also to the wholesale merchant from whom the claimant purchased his goods. It is quite frequently clearly proven by the adjustment of a stock loss that the merchant had been, for some time past, transacting his business at an actual loss, while he believed that he was making a fair profit.

CONTRACT HONEST, FAIR AND DEFINITE.

The special agent and adjuster must have observed that the insurance contract is definite and equitable. It reflects absolute honesty and fairness in all of its terms, Especially is this true concerning the provisions of the arbitration clause, which, unlike many other contracts, provides that in case of any dispute arising in the adjustment of a loss, that the matter be left to disinterested appraisers.

Surely the special agent occupies a most favored position in the business world. If he improves the opportunities afforded him, he must be qualified to give expert information concerning a wide range of subjects, and from my association and intimate acquaintance with a large number of the men in the field, covering a period of many years, I am constrained to say that the special agent has industriously and honestly improved the opportunities afforded him, and as a consequence he is to-day considered to be one of the most practical, best informed and most highly respected business men in any community.

If any suggestion noted in these hurriedly written lines should serve to give the honest, conscientious, loyal special agent a higher conception of the duties and privileges incident to the business in which he is engaged, the purpose of the writer will have been accomplished. It is my earnest wish that the special agent may live long and prosper. (Applause.)

The President: The Association is very much indebted to Mr. Cunningham for the excellent paper he has written, which can be re-read with much interest by us all. Mr. Cunningham was, without question, one of the most successful special agents on this coast, and his success along those lines can probably be attributed in large measure to the careful way in which he followed the suggestions which he has outlined to us in his paper. It is probable that some of the gentlemen present who are special agents would like to discuss some of the features of the paper, and, as there are a number who have associated with

Mr. Cunningham for a number of years in the Northwest, the Association would like very much to hear from them. I wonder if Mr. Webber would not like to say something to us upon the question.

Mr. Webber: I came into the field after Mr. Cunningham left there, Mr. President, so that is something I would not know much about.

The President: Before proceeding with the next paper, I would like to announce, in behalf of the Dinner Committee, that there are quite a number who have not yet sent in their names as indicating that they will be present. Mr. Spencer desires to have the names just as soon as possible, so as to arrange for seating all.

Those of us who had the pleasure of attending the Institute meetings listened with especial attention to that which was given to us by Professor Edmond O'Neill of the University of California at Berkeley, with accompanying demonstrations. Professor O'Neill has kindly consented to write for us a paper on "Spontaneous Combustion," which I am very happy to call upon him now to read to us. I have the pleasure, gentlemen, of introducing Professor O'Neill. (Applause.)

SPONTANEOUS COMBUSTION.

Prof. Edmond O'Neill.

The French Academicians some two hundred years ago defined a crab as a small red fish that walked backwards. Cuvier, the great naturalist, criticised this statement by saying that this definition was correct except that the crab was not small, it was not red, it was not a fish, and it did not walk backwards. So the definition that spontaneous combustion is a conflagration that starts itself is equally open to criticism. There is really no distinction between spontaneous combustion and ordinary combustion, except an artificial one.

To make this clear we may explain briefly just what combustion is. In a broad sense combustion is the chemical combination of two or more substances with evolution of heat. Usually one of these substances is oxygen, but the chemist is familiar with numerous examples of combustion in which oxygen does

not take part. Thus many bodies, such as sodium or copper or mercury, will burn freely in chlorine or bromine or iodine. Iron will readily burn in sulphur, and so on. The most familiar examples of combustion are the combination of elements with oxygen. In fact, oxidation is usually synonymous with combustion. Oxygen is the most aggressive of all the chemical elements. It may be made to combine with all of them, with one exception, viz: fluorine. The most ordinary type of combustion is the oxidation of organic matter or the products of organic matter. There are, however, many familiar examples of combustion with oxygen of other than organic bodies. Phosphorus and sulphur are burned when a match is lighted. The making of Bessemer steel is a process of combustion,—a blast of air is forced through molten iron. A part of the iron and some of the impurities are burned, and when the process has gone on long enough, an alloy, rich in carbon, is added and the resultant product is steel. Copper matte smelted from copper ores is similarly burned. The sulphur and iron of the matte are burned up by the in-running air and the finished product is blister copper. Many other examples of combustion wherein organic matter does not enter might be given, but these examples will suffice.

ORGANIC MATTER.

In the usual sense, however, combustion is the oxidation of organic substances. Organic matter is composed mainly of carbon and hydrogen. The carbon burns to carbonic acid, a gas, and the hydrogen burns to water, which at the temperature of the combustion is a gas, viz: steam, that afterwards condenses to liquid water. If the organic matter during the process of combustion gives rise to gaseous products we have flame. If there are no volatile products there will be no flame, but the mass may glow. For example, oil, wood and soft coal burn with a flame, as these bodies give off organic gases and volatile liquids, and these gases and liquids burn with a flame. Anthracite coal, coke and charcoal burn as a glowing mass, without flame. The volatile constituents have previously been driven off; in the case of coke and charcoal by previous artificial distillation; in the case of anthracite, by a natural distillation lasting hundreds of years. Of course, we may have glowing or incandescence without combustion, as for instance, when we heat metals or porcelain to redness or whiteness, or pass an electric current through filaments of metal or carbon. But in these cases there is no combustion. There is no oxidation, no chemical combination with oxygen.

The phenomenon is purely a physical one, not chemical,—and combustion is purely a chemical action.

COMBUSTION.

Combustion, then, in the restricted sense, may be defined as the chemical combination of organic matter with oxygen, always with the evolution of heat and usually with the evolution of light. Light is not always the accompaner of combustion. The largest example of combustion is the decay of organic matter. This decay is a true example of combustion, but no light is thereby produced. All organic matter on the surface of the globe is doomed to annihilation. All the animal and plant life that ever existed is slowly burned up and the products of this burning are the same as in quick combustion, viz: carbonic acid and water. The products of this decaying organic matter vastly exceed the amounts produced in ordinary burning of fuel and conflagrations. All living matter is fated to die. Even in life there is death. Plants are continuously dropping their leaves. These decay and their organic constituents are oxidized. Animals are constantly burning. The body temperature is maintained by this process. We might define the distinction between animals and plants by saying that animals are burnt up internally during life, and plants are burned up externally after death. The final end is the same. It is a true example of combustion, although at first sight it seems to be vastly different from a coal fire, as the burning of a building.

In contrast with this slow, unobtrusive, almost insensible burning we have the violent destructive combustion termed an explosion. When gunpowder or dynamite is exploded we have another example of combustion. The organic matter is charcoal derived from wood, or glycerine prepared from fats. The oxygen is furnished by the nitre in one case, and in the other by the nitric acid used in the manufacture of the nitro-glycerine. The oxygen in the nitre and the nitric acid were primarily derived from the oxygen of the atmosphere which by a chemical process become stored up in the solid nitre in the liquid nitric acid. The only difference in the three types of combustion is the element of time. The decay of organic matter is a slow, lengthy process. It may take months or years to complete the burning of a pound of organic matter by rotting. It depends upon the temperature, the amount of oxygen available, and the amount of moisture. The greater the amount of air, the higher the temperature; and the greater amount of moisture, the more rapid the decay. Wood immersed in water may last indefinitely,

as the amount of oxygen available is very small. In the tropics wood rots rapidly owing to the heat and moisture. In the dry climates organic matter becomes mummified. In the cold of the Arctic the flesh of animals may last for centuries; witness the case of prehistoric mammoths imbedded in the ice, whose flesh is fed to dogs centuries after they existed. It is not the place here to tell the part that bacteria play in this process of combustion.

In the second type of combustion, viz: ordinary burning, the time is very much shortened. A pound of coal or wood thrown into a stove or grate is consumed in a few minutes or an hour. Whole cities have been destroyed by fire in a few days, as witness the case of San Francisco.

The third type of combustion, viz: explosion, takes place in a fraction of a second. The velocity of detonation in nitro-glycerine is estimated to be about one mile per second, in gun-cotton about three miles per second.

THREE TYPES OF COMBUSTION.

These three types of combustion are the same, inasmuch as they are all examples of chemical combination of oxygen and organic matter with evolution of heat. The same amount of heat is set free in all cases by the oxidation of the same weight of the same organic body whether the reaction is completed in centuries or in a fraction of a second. The only difference is the sensible effect. But this difference is quite marked. I am sure that any one of us could tell the difference if we sat on a pound of decaying leaves or a pound of nitro-glycerine that was exploding. It is the difference between driving a nail by the pressure of the atmosphere, or putting a heavy weight on it, or striking it with a hammer. The only difference is the time element. Theoretically they are the same, but we have here two examples of the difference between theory and practice.

There is one more essential for combustion. The Germans have a saying, "Alle gute Dinge sind Drei." All good things are three in number. Three is a mystic number and the mystic phenomenon of fire requires three elements,—organic matter, oxygen and the temperature of ignition. We may have a combustible substance, we may have oxygen, but if the temperature of ignition is not evolved there will be no fire, no explosion. This temperature of ignition varies according to circumstances. The scientist has a theoretical temperature point called the absolute zero. This temperature has never been reached. It is 273 Centigrade, equivalent to 451 degrees Fahrenheit below zero. At this

temperature it is believed that no chemical action of whatever sort will take place. It is absolute death. But as we ascend the temperature scale from this point, chemical action will begin. Oxidation, which is another name for combustion, takes place at various temperatures according to circumstances. Some bodies will begin to oxidize at lower temperatures than others. In other words, some bodies will begin to burn sooner than others as the temperature rises. The following is a table of temperatures of ignition of a few substances:

Substance.	Centigrade.	Fahrenheit.
	Degrees.	Degrees.
Phosphorus	60	140
Carbon Disulphide	149	300
Sulphur	250	482
Sulphureted Hydrogen.....	260	502
Acetylene	480	900
Ethylene	580	1044
Coal Gas.....	648	1198
Hydrogen	650	1202
Marsh Gas.....	667	1233
Carbon Monoxide.....	700	1292
Charcoal	350 to 700	662 to 1292

We can see by an inspection of this table that there is a wide difference in the temperature of ignition of different bodies. Phosphorus ignited at a temperature of 140 degrees Fahrenheit, which is only about 42 degrees above the temperature of the human body and is far below the temperature of boiling water. There are many bodies known to chemists whose igniting point is below the ordinary temperature of the air. Such bodies, of course, cannot exist unless sealed in tubes or kept in a vacuum or in gases that contain no oxygen. Even phosphorus, which has an igniting point considerably above any ordinary atmospheric temperature, must be kept in sealed tins or under water, for reasons that will be explained presently.

On the other hand, there are bodies that will not combine with oxygen no matter how high the temperature. Gold and platinum are examples. Acetylene ignites at 900 degrees Fahr., which is below the temperature of a glowing splinter of wood or a burning cigar. This latter temperature is about 1000 degrees Fahr., which explains why we can ignite acetylene with a burning cigar, while coal gas cannot be so ignited. There is another reason why acetylene takes fire more readily than ordinary gas, but we have not time to explain it here.

SULPHUR IGNITES.

Sulphur ignites at 482 degrees Fahr., while wood ignites above 600 degrees Fahr. Advantage is taken of these facts in making matches. The phosphorus ignites by slight friction. This sets fire to the sulphur and the sulphur in turn causes the wood to burn. It is perfectly possible to light a match without the aid of phosphorus and sulphur. We are all familiar from our reading with the way the savages obtain fire by rubbing a stick in a block of wood. This may take many minutes or half an hour of the hardest kind of rubbing, but it will succeed. When the temperature of ignition is once reached the combustible matter will continue to burn as long as oxygen is furnished, for heat is evolved in the chemical combinations of the combustible body and oxygen, and this evolved heat maintains the temperature of ignition and the chemical combining goes on, or in other words, the body continues to burn.

To recapitulate, for combustion three conditions are essential. First, a combustible body; second, presence of oxygen; third, the temperature of ignition. In addition to these three conditions which are necessary to induce combustion, we must remember first, that in oxidation or combustion heat is generated, that this heat usually suffices to keep up the temperature of ignition and the mass will continue to burn; and second, that if the temperature of the burning mass be cooled below the igniting point, that oxidation or combustion will cease, or in other words, the fire will go out. With these conceptions fixed clearly in our mind we are now ready to consider the subject of spontaneous combustion.

As we said in the beginning, considered in a strict sense there is no difference between spontaneous combustion and ordinary combustion. In one case the burning is accidental; in the other intentional. However, as the term is so well-known and is of such importance from the fire underwriter's standpoint, it might be well to consider a few of the instances of so called spontaneous combustion and means of preventing them.

SPONTANEOUS COMBUSTION OF COAL.

Perhaps the most important, from a local standpoint, is the spontaneous combustion of coal. Many a ship coming to this port laden with coal has suffered disaster from fire breaking out in the cargo, destroying the vessel, sometimes with death to all on board. The vessel begins her voyage with two elements to the conflagration,—the combustible material and the oxygen. The third element, viz: the temperature of ignition is not present

as the ship leaves the port. But how often is this reached! and then comes disaster. The conditions on board a coal ship that are likely to cause the cargo to take fire are as follows: The quality of the coal. Some coal contains pyrites or sulphide of iron. This sulphide of iron is an easily oxidizable substance, particularly in the presence of water. Oxidation is always accompanied with heat. This heat accumulates, the temperature of the coal rises, and soon the temperature of ignition is reached. The cargo takes fire. If little oxygen is present the fire may smoulder and the vessel may make port, and the fire be extinguished. Or the gases may accumulate until the pressure becomes so great that the ship is blown asunder, and once the air gets to this mass of fuel heated to above the ignition point, there is no hope. Many a captain has ordered the hatches to be opened to ascertain where the fire is and a burst of flame issues that cannot be extinguished.

Sometimes the coal contains a resinous body that absorbs oxygen readily with consequent heating. This resinous body has a very low ignition point. It burns and sets the coal on fire. This apparently was the cause of the great fire in the coal supply of the Southern Pacific at Truckee some years ago. I was able to extract considerable of this resinous body from that coal and to determine its oxygen absorption power and its temperature of ignition.

Another condition favorable for spontaneous combustion of coal is its fineness of division. The absorption of oxygen by a solid is a surface phenomenon. The finer the division of the coal, the greater the surface per given weight, and it is self-evident that, while coal might be perfectly safe to carry in lumps, it would take fire if powdered. An example of this fact is shown in the case of iron. Iron combines with oxygen. We all know how iron rusts when exposed to the atmosphere. But the process is slow. It takes months or years for an iron nail to burn up. But it will in time. The nail will be gone and in its place will be a lump of friable iron rust, the ashes of the nail. But if this nail be finely divided, as it can be by chemical means, and this fine iron powder be exposed to the atmosphere, it will instantly take fire and burn with evolution of heat and light very much as gunpowder does, and coal will behave exactly the same way, only it is easier to burn as it combines more readily with oxygen and the ignition temperature is lower than in the case of iron.

There is one factor, however, that renders finely divided coal safer than the same coal in lumps. If powdered it packs better and there is less room for air in the interstices and therefore

less oxygen to burn the coal. But this factor does not balance the other.

There is another cause that renders coal liable to spontaneous combustion. Any solid has the power of condensing oxygen on its surface. This condensed oxygen, "occluded oxygen," as the chemist calls it, is much more active than ordinary oxygen. It combines more readily with substances than ordinary oxygen. In other words, it easily sets the coal on fire. We have an example of this in the self-igniting cigar lighters that are so much used. A piece of platinum very finely divided, so called platinum sponge, is fastened to a holder. Platinum to a marked degree possesses the power of occluding oxygen. This platinum sponge with its occluded oxygen is plunged into a cylinder that contains wood alcohol soaked in asbestos. This wood alcohol gives off vapors. The occluded oxygen oxidizes this vapor, heat is developed by the oxidation, the platinum sponge becomes red-hot and the alcohol is ignited. Similar conditions prevail in the coal; not so marked, of course, but the result is the same. Where one takes a second the other takes days, or weeks, or months.

Another accelerating factor in causing spontaneous combustion in coal ships is the grinding of the coal in a loosely packed cargo. This grinding is harmful in two ways. First, by generating heat as the result of friction; second, by grinding the coal into finer particles, thus exposing fresh surfaces to the action of the air, and thereby permitting the escape of combustible and easily ignitable gases that may be contained within the coal.

PREVENTING SPONTANEOUS COMBUSTION.

As a means of preventing spontaneous combustion we have only to remember that the fire can only occur when the three elements are present. First, a combustible substance; second, the presence of oxygen; third, increase of temperature to the igniting point. Of course the first element is fixed, and hence elimination of one or of both of the other two factors is the only thing possible. In regard to the first, viz: elimination of the oxygen, several plans have been proposed. The usual method is to expel the air with carbonic acid. Sometimes cylinders of liquid carbonic acid are placed in various parts of the cargo. These cylinders are stoppered with fusible plugs, which melt when the temperature reaches a certain point, of course, being below the ignition point, and the carbonic acid escapes, driving out the air. If the temperature of the coal has reached too high

a point, this remedy is dangerous, as carbonic acid is decomposed by hot coal, forming carbon monoxide, a combustible gas. Steam has been proposed. This is efficient as long as it is steam, but it takes large amounts to heat the cargo so that it will remain as steam. If it condenses, air will rush in to take its place and the original dangerous condition is restored. Steam is also decomposed by hot coal, forming hydrogen and carbon monoxide, so called water gas. Both of these gases are combustible and have a comparatively low ignition point. A better gas to use would be nitrogen, and in these days of liquid air, a cheap method of preparing nitrogen is available.

The other method of preventing spontaneous combustion in coal is to keep the temperature below the ignition point. This is best effected by ventilation. If the temperature is kept below the ignition point there is no danger of fire. But the ventilation must be complete. If insufficient it is worse than useless, for it introduces oxygen into the burning coal. It is really blowing air into a fire. There is a case on record of four ships loaded with coal starting about the same time from England. Three were provided with ventilators and one was not. The three ventilated ones were lost. The unventilated one arrived safe.

The best way of ascertaining the condition of a coal cargo is to take the temperature frequently and thus any dangerous rise can be detected and steps taken to remedy the trouble before it has gone too far.

OTHER TYPES OF COMBUSTION.

Somewhat analogous to the case of coal are the examples of spontaneous combustion in hay stacks. Many a stack has been destroyed together with costly barns by the hay taking fire. We have here an element that is not present in the case of coal, *viz*: bacteria. Some of them absorb oxygen, evolving carbonic acid, with consequent evolution of heat. The ignition point of hay is quite low, and this added to the bulky character of the material admitting large amounts of air, and to its bad conducting character, thus preventing the radiation of the heat, accounts for the prevalence of fire in hay stacks. The practice of adding salt to prevent these fires seems to have some efficiency. It probably prevents the development of bacteria. Ventilation, when properly done, is also efficient.

Other crops when stored in quantities may take fire under similar conditions. Hops and tobacco are familiar examples.

Time prevents me from dwelling on many more examples of spontaneous combustion, as for example in coal mines from

evolved gases, and from the finely divided dust. Oils, paints and varnishes, particularly when containing the so-called drying oils, such as linseed and castor oils. These oils absorb oxygen rapidly with consequent increase of temperature. When spread on porous materials, such as rags and paper, the available surface for oxidation is greatly increased and if confined in boxes or close rooms where there is no ventilation, with consequent cooling below the ignition point, these will certainly take fire. Hot ashes is another cause of spontaneous combustion. Another cause of spontaneous combustion is where the ignition of the material takes place through the agency of an electric spark produced by the friction in mills used to grind dry materials, such as shoddy, and rag mills, flour, malt, rice and meal mills,—sawdust and soap,—dyeing and cleaning mills,—sulphur and powder mills,—dry cleaning with benzine and petroleum spirits,—and many others.

A curious example of this was related by Lord Kelvin, in the case of a lady whose hair was being rubbed with a benzine preparation. An electric spark was thus produced which ignited the benzine. This accident was attended with fatal results.

Other types of spontaneous combustion occur in connection with the petroleum industry and the manufacture of explosives. Interesting and curious cases of this character, many of which have come under my own observation, might be related, but time forbids.

I trust that this brief and elementary exposition of the subject of spontaneous combustion may have been of some interest to you and that you have appreciated that the name is a misnomer, that there is no effect without a cause, and that it is the mission of the scientific man to ascertain causes, with the idea that those discoveries will ameliorate the lot of mankind, even if they are fire underwriters. (Applause.)

The President: Gentlemen, this very interesting paper is far out of the usual line of our discussions, and it should not be passed by without some observations. I think Professor O'Neill would be only too glad to reply to any questions that you may care to put to him. I would like to ask Mr. Osborn, who has looked into the subject, if there is any question that he would like to ask Professor O'Neill.

Mr. Osborn: I listened with a great deal of interest to the

paper just read to us, Mr. President, and I was very much impressed by it. It is a subject that I think every underwriter has given a great deal of attention to for many years. Undoubtedly many of us had brought home the fact that, if theoretically carried out, the scheme of underwriting may resolve itself eventually into conducting scientific experiments and penetrating into the phenomena connected with the subjects which we insure, to detect the chemical qualities that will produce the so-called misnomer, spontaneous combustion. It may seem to us all, undoubtedly it did to many of us, that it is purely an academic discussion. But I don't take that view of it. Naturally, within the scope of a paper so limited and a subject so vast, one in Professor O'Neill's position must resort to the technical and academic features of it. But throughout that paper I have been impressed with the importance of at some future date having Professor O'Neill discuss further and more elaborately and more in detail this subject, which to every underwriter is one of the greatest and most profound importance.

I remember years ago, some twenty odd, when I was taking my early lessons in inspection, going out with a very prominent inspector. We went into a planing mill down on Brannan street. We went through the mill, I following my friend, taking up every point, absorbing it, digesting it, until we came to the staircasing near a window which was open. On the staircasing was an open barrel with lampblack in it. The first thing the inspector did was to call up the proprietor and tell him that that lampblack was a very dangerous thing and was in a dangerous location. "Well," said the inspector, "I tell you that spontaneous combustion will ensue if that is not removed, and especially during this rainy season." And he gave him ten days, if I remember rightly, within which to remove it. Within the ten days a fire occurred at that place. The inspector came to me, and he said, "Osborn, I want you to go down there with me." We went down. The fire occurred precisely where he said it would, in the lampblack barrel, the result of the moisture of the rain getting into the barrel, and coming in contact with the air and sun,

spontaneous combustion ensued. That man knew nothing about it.

Later on in my career, during my inspection, I ran into a prominent paint store here, and on the third floor I found this lampblack contained in paper bags, and those bags were put in a barrel near a window. I called attention to it, and told the man the little incident that had occurred in connection with lampblack, and that it was dangerous, and he laughed at me. He said he never heard of it, and he had been in the business thirty odd years; that he never even heard that lampblack would spontaneously ignite. I said to him, "Well, it does and it will." He said he would take it away. I told him I would bet him a box of cigars that lampblack would ignite spontaneously. He then went to a very prominent chemist in San Francisco, who upheld my theory, and I got the cigars.

This only goes to show that those who are familiar with such subjects are not always familiar with the chemical quality in substances which frequently tends to produce what in our business is termed spontaneous combustion. We have it in every one of our experiences. And this great cause which the President has outlined in his address as "unknown," which is the bugbear in our business, causing us trouble every day, is undoubtedly attributable many times to this very thing, spontaneous combustion.

It does not matter to me as a layman whether spontaneous combustion is a misnomer or not. It does not, to my mind, require any effort to discover that there is no cause of fire as insidious and beyond the reach of the ordinary mind. If, through the process outlined by the Professor to-day, we can get at that by inspection, and can learn how to reach that danger and point it out, we will have accomplished much in the reduction of the "unknown cause."

I only want to add that I hope, as I said before, that the time will come when we can engage the further efforts of Professor O'Neill in an enlarged discussion of this question, giving it in a detailed way, applicable to our business in the particular

hazards that we may have. The way to do that is to bring it personally, or through committee, or otherwise, to the Professor, and gain from him the knowledge that he undoubtedly has to impart to us upon the varied branches of the subject. (Applause.)

Mr. Heuer: I would like to ask Professor O'Neill a question, Mr. President. There is a product that is coming into use very largely that we know as denatured alcohol. In investigating this somewhat, I have come across two different opinions of men having knowledge of the subject, one of whom takes the stand that denatured alcohol is liable to spontaneous combustion and is a very dangerous article, and the other is inclined to a different opinion, in fact, the opposite opinion. If it is a fair question and Professor O'Neill will take the time, I would like to ask him his opinion on those points. It would be a great help to us, and I am sure we would all appreciate it.

Professor O'Neill: Denatured alcohol is a body of varying composition. You are aware that the so-called denatured alcohol is ordinary methyl alcohol, ordinary alcohol to which certain substances are added to prevent it being used as a beverage, and which will not prevent it being used for particular purposes. As these purposes are varied, the material that they add to the ordinary alcohol varies. Of course, the whole problem is a fight between the Government and the appetite of the alcohol drinker. Originally they used to add ten per cent of wood spirits to ordinary alcohol, as it has a disagreeable flavor, odor and taste. It was thought that ten per cent would prevent the ordinary man from drinking it instead of buying ordinary liquor. But they soon found that this ten per cent did not prevent its being used as a beverage. Then they began adding other things which were more unpalatable. For example, the latest mixture in Germany is to add to ordinary alcohol ten per cent of a mixture which I think is one-fourth wood alcohol, one-fourth petroleum spirit, one-fourth bone oil and one-fourth vegetable extract that smells something like asafoetida. With this mixture they think they have the alcohol safe. It is only in this morn-

ing's paper, as perhaps some of you have read, that some sailors in Vallejo aboard one of the warships drank a preparation that was made of alcohol and rubber, used for stopping up cracks, and the cracks were stopped up in the interior mechanism of the sailers so conclusively that I think they have quit. But frequently aboard ship they used to drink all the varnish, the varnish that is made with alcohol, and now they have a special room in which the varnish is locked up.

As an example of the lengths to which the appetites of men will lead them in their thirst for alcohol, I remember this example in my own experience. When I was a student at medical college, they had a large collection of pathological specimens, cancers and tumors and all sorts of materials, which had been obtained from patients who had been operated upon, and these were kept in alcohol; the old way of keeping those substances were in bottles arranged in a large case. It was noticed finally that they began to decay, and nobody could understand why. On further examination it was found that the alcohol had practically all disappeared, and that it was only water, and afterwards it was proved that the janitor of the building had been taking a little of the alcohol out of those jars, and in order to conceal his theft, had filled up the bottles each time with water, and little by little the alcohol had disappeared. This is an example of how an ardent drinker who decided to break off the habit: He bought himself a barrel of whiskey, and every time he took a drink from it he put back in the barrel the same amount of water. In the course of a year he was drinking water, without any idea of the gradual change. It is the same thing in regard to denatured alcohol. It depends entirely upon what you include in it.

The United States law permits various mixtures of this denatured alcohol. You have to submit the particular addition that you wish to make, and then, if it is satisfactory in the eyes of the authorities, it is permitted. Those mixtures may be of various sorts. Pure wood alcohol is not spontaneously combustible. But impure wood alcohol, with, say, the aldehydes,

which easily absorb oxygen, is. But then it is a question of the shape in which the material is kept. If it is in bulk, there is very little danger. But if it is spread out in anyway, spilled on the floor, say, then these aldehyde bodies are easily combustible and will set fire to the mass. In the case mentioned of course it is the oxidation which does it.

Pure so-called methyl alcohol and pure alcohol I do not think will burn spontaneously. But impure brands, brands that have these substances added, increase the danger, and by adding more of such materials of course increases the danger. So the question must be answered in that way.

Perhaps some of you are aware of the modern method of disinfection with formaldehyde, so-called formaline. One, and the usual, way of disinfecting with this is by putting the formaldehyde in the room you wish to disinfect, and all that it amounts to is having a vessel in which you put wood alcohol with a copper gauze above it. You ignite it and that heats the copper, and then the flame is blown out, and the vapor from the wood alcohol passing up through the copper gauze continues to keep it redhot—there is no heat, it is merely the vapor from below oxidizing, and one of those products of oxidation is the formaline, which, of course, passes into the air and accomplishes the disinfection.

Alcohols will oxidize under proper condition, and these impure alcohols oxidize very readily, and from them there will be at times spontaneous combustion. (Applause.)

The President: We have with us to-day a gentleman who is in touch with the insurance business in a marked degree, who has made a study of it, and whose work has contributed to the low loss ratio in the State of Washington, and I want to ask that gentleman, Mr. Lee McKenzie, if he has anything he would like to ask Professor O'Neill.

Mr. McKenzie: I would like to ask Professor O'Neill a whole lot of questions, but if I started in it would take too long. I shall be very glad to get hold of Professor O'Neill's paper

after it is printed and study it very carefully, because there are a great many things in it that we should learn. I have no questions to ask Professor O'Neill at the present time, thank you, Mr. President.

The President: The chair will announce the following as the Committee on Nominations: C. Mason Kinne, chairman; W. H. Lowden, Louis Weinmann, A. W. Thornton and V. C. Driffield.

As it is now 12 o'clock, if there is no objection, the meeting will stand adjourned until this afternoon at 2.



AFTERNOON SESSION.

The President: The meeting will please come to order. Before proceeding with the program I beg to announce the appointment of the following committee:

Committee on the Report of the Executive Committee and Committee on President's Address—Messrs. Herbert Folger, F. B. Kellam and J. L. Fuller.

In listening to the reports this morning, the chair inadvertently omitted to call for the Report of the Librarian, Mr. J. P. Moore. I will now call upon Mr. Moore to read his report.

REPORT OF THE LIBRARIAN.

At the last Annual Meeting I had the pleasure of reporting that we were once more beginning an Insurance Library. In the report of the Secretary at the First Annual Meeting of this Association, February 20, 1877, I find the following: "At a meeting held March 21st, 1876, a committee, consisting of Messrs. Geo. W. Spencer, R. H. Magill and B. C. Dick, was appointed to form a nucleus for a library for the Association. The committee have never made a report showing progress."

No report was made until 1879, when Mr. L. Beck of the Committee on Library reported 42 volumes and 6 pamphlets as being on hand. From that time the growth seems to have been steady until in 1906 you had nearly 6,000 books and pamphlets (bound and unbound).

Then came the disastrous conflagration, and the work of all the years was swept away.

Since then many kind expressions of sympathy and offers of help have been received. This sympathy, I am happy to say, still continues, and the help from kindred organizations, as well as from individuals, has materialized to an altogether unexpected extent. In some departments, especially in the work of Foreign Institutes, we are more fully equipped than at any previous time.

Much correspondence has necessarily been maintained, and in every case the thanks of the Association have been returned for donations received.

Without wearying you with a list of all the donors, I wish to especially mention the Fire Underwriters' Association of the Northwest.

The National Fire Protection Association.
 The Underwriters' Bureau of New England.
 The Insurance Engineering Experiment Station.
 The Insurance Institutes of Ireland.
 Montreal, Newcastle-upon-Tyne.
 Norwich Union, Toronto and Yorkshire.
 The Insurance Engineering Society of New South Wales.

Especial thanks are also due to the Royal Insurance Company, the Liverpool and London and Globe Insurance Company, the Fireman's Fund Insurance Company, the New Zealand Insurance Company and to Mr. Rolla V. Watt, Col. C. Mason Kinne, Mr. J. W. Gunn, Mr. Alfred Stillman, Mr. F. H. Porter, Mr. Louis Weinmann.

All these have been of great help financially or by valuable contributions of books, magazines, etc.:

Until recently we have had no library room, but, thanks to your Executive Committee and by the kindness of the Board of Fire Underwriters, we are once more in our old Library quarters. While we were without a room the work was doubly arduous for me, as I was compelled to transport all the work of the Library to my home in Oakland, where I took up the card cataloging of the library, which has progressed as rapidly as possible.

Some 5,000 cards are already entered, and in time the work will be completed and everything entered by title, author and subject, together with the necessary cross indices.

We are at present hampered by lack of sufficient cases, which is delaying our work.

That you may form some idea of the material on hand, I herewith submit a catalogue by titles only. It may serve as an inventory and show you how poor we still are in the many valuable works on insurance.

I am reminded of the "street gamin" in London who pulled the tail of John B. Gough's coat as he was coming from one of his temperance lectures.

"What do you want, my little fellow?" said Gough. "Please sir, I wants everything."

That's our condition exactly. "Donations to our Library are like a motion to adjourn, always in order."

In closing, permit me to read an extract from a paper by Mr. Henry E. Hess entitled "The Making of an Insurance Library."

This paper I regard as by far the most valuable contribution

on the subject which has ever been printed, and I wish that every member of this Association would take the time to read it.

Mr. Hess says: "If I were asked, 'Is it worth while to attempt the creation of a fire insurance library?' I would answer: 'Yes, but do it as soon as possible and secure copies of publications made in by-gone years as soon as you can, because every year adds to the difficulty of finding them.' Note that I do not claim that all old books are necessarily interesting or of value, for many are not, but I hold that a complete fire insurance library should embrace everything pertaining to specialty that can possibly be collected, leaving the chances of its ever being wanted to take care of themselves. Even if that claim is denied and only such books are sought as represent a living interest, they will be found more and more difficult to secure.

Whatever the scope of a fire insurance library may be, whether it seeks to include everything ever published in connection with the business, or only that which may represent the living publications of the day, it isn't worth the labor of gathering together unless it is made readily accessible. To that end it should be located in quarters where it can be reached at any time during business hours. It should be card indexed—it should be placed in charge of a competent trained librarian, and a printed catalogue should be furnished for the use of the members. Nothing less will make it worth having; little more will need to be done.

That little will be represented chiefly in keeping it up-to-date, and in putting into substantial bindings all pamphlets and periodical publications. Upon this latter I lay great stress, because paper bound publications, whether serials or single pamphlets, cannot be permanently preserved, and at the same time be in shape for reference when wanted, except by being bound into convenient volumes.

In the making of an insurance library, there must be the desire, the will and the means. If the desire is not a strong one, and the will is not a very determined one, my advice would be not to set out upon the undertaking. Even if both these requirements are met, the question of means will still be an important one, because a library cannot be built up without the expenditure of much money.

Associations that want a library should assess themselves for its foundation and maintenance; nor can money be better invested either for individual or collective profit than in such an undertaking.

In looking over the work of the various insurance institutes I am struck with the fact that they invariably combine life, accident, marine and fire. This is true of the following:

Belfast, Birmingham, Cardiff, Ireland, Liverpool, London, Manchester, Montreal, Newcastle-upon-Tyne, New South Wales, New Zealand, Queensland, South Africa, Toronto, Victoria and Yorkshire. It is safe to say that one-half of the material of our Library deals with life, accident and marine insurance. If we turn to the law, we find about the same proportion. More than one-half the cases reported in the Insurance Law Journal are upon life and accident insurance. It will thus be seen that we already have a library of great use to either the life insurance companies, the accident or the marine insurance companies.

It would seem that at least a move should be made to induce these departments of insurance to join us in our Library and avail themselves of the valuable data we have on hand. In this way a portion of the expense may be borne to carry on the work we have undertaken.

The Secretary: Mr. President, in connection with Mr. Moore's report, I desire to state that we have looked over the different institutes extant, and I bring before you something to think of in the way of enlargement of this Association. All of the insurance institutes combine life, accident, marine and fire insurance in their libraries; all on the continent, in Australia, in New Zealand, and the only two in our country of the larger associations that do not combine are the Fire Underwriters of the Northwest and our own. It seems to me if we can induce these sister associations, later on, through the Institute, that is the life, fire and accident people, to join our Library, we can in that way raise more funds and keep the Library in better shape and carry it forward. This is only brought to your notice so that you may think of it, and, when you meet any of our brethren in other lines of insurance, advocate it, as I would. Mr. Moore is more familiar with the subject, and I wish he would supplement my remarks.

Mr. Moore: By way of addition to the statement of Mr. Meade, let me take something you are familiar with in the way of insurance literature. You all take, I presume, the Insurance

Law Journal. You know as well as I that ninety per cent of the cases in the Insurance Law Journal are life, accident and marine, and just about ten per cent of them touch our special business of fire insurance. That same thing holds true with the entire Library. We have a very valuable collection for marine work, if any of you are engaged in marine work—a very valuable collection of material for the marine underwriters. We have also an immense amount of material through the work of the different institutes, touching on the life insurance question, the economics and the mathematical side of it, and the work of the actuarial societies. All of those things would go to help you if you feel interested enough to meet these different organizations, and have them combine with you for the use of the library, and also in the institute. The institute work in the Old World and in Australia, Montreal, and elsewhere, more than half of it as represented by the institute papers, touch on the subject of life, accident or marine insurance. They have taken this very step of inducing the life, accident and marine and casualty companies to join with them. I think it is a very excellent plan, and should be made to work here on this coast.

The President: The subject which has just been presented is an entirely new thought for this Association. So far we have paddled our own canoe. Whether we will be able to continue to do it and give our Secretary and Librarian proper recompense for their services, and maintain a library in the shape it should be maintained, is a question—a very doubtful question. For my part, I do not believe that it would be feasible to attempt to induce these other associations to amalgamate with us any further than in the work of the library and probably of the institute. The subject-matters before us are entirely different, there is nothing that would be analagous in the various discussions that would be had in the different lines of insurance. But, on the other hand, a combined library would be very useful in many ways to all of the different branches of insurance, and, if the subject is properly presented to the other branches of insurance, I

believe they would be willing to join with us, so far as that is concerned, maintaining the identity of this Association, aside from the library and institute feature, absolutely. I trust that some of the gentlemen present will give us their views upon this matter, and that you will consider recommending the appointment of a committee to take up the subject further before the meeting closes.

Mr. Gibbons: Mr. President, I move that the Executive Committee be empowered to take such action in the matter as is necessary towards securing the assistance of the other classes of insurance, to maintain the library, and looking, possibly, toward some joint action in regard to an institute.

The Secretary: I second the motion.

Mr. Kinne: I desire to second that motion, if it shall be plainly understood, and so stated to the other organizations, that there is no intention and can be no intention of having them become members of the Fire Underwriters' Association of the Pacific. That is the way I feel about it. We come here for practical purposes, pertaining to our own line of business. If they understand that, and are willing to join in furnishing books and periodicals to the library, and are willing to pay a portion of the expense incident thereto, it certainly is no detriment to this Association, and will be of great value to our library. But if they become members here and read papers about the amount of premium we have to pay on our life insurance, for instance, when that is about all we know about their line of business, I think it would be a waste of time. But with that understanding I certainly heartily second the motion.

The Secretary: Mr. President, Colonel Kinne has voiced my idea exactly on the subject. It is only to bring the associations together in the library. We cannot amalgamate. That idea was not in my mind. I thought it would be wise to bring this matter before the Association. I know the library is of value to a great many members of our Association. I know it is helping the older men, too, so far as that is concerned. The legal points

are threshed out for us there, and we have the data to help us in all directions. The whole idea now is just to further the library by outside aid and interest in it.

The question was called for, and the motion put and unanimously carried.

Mr. Kinne: At this time, Mr. President, it occurs to me that it would be an entirely proper thing, when one who has been in active service in our business has retired, so that he can no longer be an active member of the Association, to make him an honorary member. From my acquaintance with one who has recently retired, Mr. Tom C. Grant (which acquaintance dates back way beyond the Chicago fire and the old Pacific Insurance Company), I not only deem it a pleasure but almost a duty to propose his name for honorary membership in our society.

Mr. Driffield: I second the motion.

The President: It gives me very great pleasure, gentlemen, to entertain this motion and to announce to you the recommendation of Colonel Kinne that Mr. Tom C. Grant be elected an honorary member of this Association.

The motion unanimously prevailed, and, upon further motion, the Secretary cast the ballot of the Association in favor of Mr. Grant, and so announced, and the President declared him a duly elected honorary member.

Mr. Kinne: In this same connection, Mr. President, along exactly the same lines, you will remember that there is an old saying that sometimes people die in the profession, but seldom resign—there is one whom we have known for many years, one whom we have thought one of our brightest companions, who has now left us for a distant part of the United States, and is no longer with us, and therefore not now eligible to be an active member of this Association, Mr. Edward Niles, whom I take exceeding pleasure in proposing for honorary membership. (Applause.)

Mr. Kellam: I second the motion, and I move that the

Secretary cast the ballot of the Association in favor of Mr. Niles as an honorary member of the Association.

Both motions prevailed, and the Secretary announced that the ballot was cast, whereupon the President declared Mr. Niles a duly elected honorary member of the Association.

The President: I may say in this connection, gentlemen, that I had a joking letter from Mr. Niles, in which he said that if we wanted to make him a Christmas present, we could make him an honorary member of the Association. I am sure he will be delighted to learn of our having done so.

It has been the history of this Association that when it found a new man who took an interest in the Association and who was willing to contribute to the addresses to be given before the Association, and therefore to the information of the Association, to take prompt advantage of his willingness. I now take such pleasure in calling upon a comparatively new man upon the coast, Mr. H. C. Koempel, to give us a paper entitled "From the Viewpoint of an Adjuster."

FROM THE VIEWPOINT OF AN ADJUSTER.

H. C. Koempel.

Having recently migrated to the "glorious climate of California," it is the intention of this paper to comment briefly on the impressions made upon me by what I have seen. As I expected, I find the new responsibilities not one whit less than those I discarded when I left the East. The accounting of the expenditure of the companies' funds, the honest safeguarding of their interests, the necessity of justice to all and the weight of the stewardship are, if possible, more important in the West, with its free and easy and broad way of doing things, than in the tighter-methoded East. The policy holder, I observe, here as elsewhere, is also equally keen to annex a profit to his indemnity allowance.

Standard authorities agree that "Insurance is a contract whereby one party, in consideration of a stipulated consideration or premium, undertakes to pay a given sum or sums upon the occurrence of a certain contingency," and behold in the undertaker, the adjuster, who, to quote again, "determines the exact

amount accruing as indemnity for loss." Therefore the work of both special agent, who is often an adjuster, and adjuster, who is not a special agent, is cut out, but both being mortals are not infallible, and while conscientious effort is directed and applied to securing for the assured and companies an equitable settlement, it results oftentimes that the assured, "by ways that are dark and tricks that are vain," succeeds in reaping where he has not sown. No just criticism can follow when, in spite of all the caution possible, this is the result of omission and not of commission; errors of judgment are and always may be found; they are factors in every business. It is the sins of commission mostly of carelessness or a desire to save time which lead to jump settlements (having no other basis than that of measuring by the eye without minute investigation), adjustments without investigation of any kind whatsoever or the settling of differences by the flipping of a coin to determine "Who's It." Such modes of settlement, aside from their unbusiness-like methods, must be deplored, and any effort to "Dalzell Brownize" the funds entrusted to our keeping condemned. On the grounds of fair play, if on no other and higher grounds, each and every claim must have the best effort of the company's representative, be he special agent or adjuster, as nothing so discredits the business as slipshod and haphazard methods employed in fixing indemnities for loss. On the other hand, there is no desire to encourage (so-called) technical adjustments, the only aim of which is the purpose of sweating out a salvage where none is due. The slipshod settlement is done in ignorance, the other class is rascality. It may, however, be that cases are possible where the devil must be fought with fire. One of the prime virtues of an adjuster is that he must be mentally well poised and equipped with the tact and diplomacy to know when to hold on and when to let go.

Experience teaches that an assured otherwise the essence of truthfulness and honor loses these attributes when he finds himself possessed of a contract classed as a realizable asset. Many excessive claims are presented having their only excuse in the statement so often made that companies will give you but one-half of your loss anyway, and why not go the whole hog. How far the remedy for this feeling lies with the companies is past finding out, but a large percentage certainly rests with the adjuster. The cure can readily be found in the equitable treatment of all honest claims and the resistance to the last ditch of each and every attempt by dishonest and designing claimants to divorce the company from its money.

Now as to my impressions, I am willing to plead guilty to liking my new field, my new companies and my fellow adjusters; gentlemen every one of them, is my impression. Still, like the insurance man who went to heaven and wanted it lighted by gas as a reform measure, I, in this heaven, am impressed with the idea that a few improvements might be made—the one for the welfare and peace of mind of the special agent or adjuster, and the others for the financial good of the companies.

The one: Adoption of the iron safe clause on policy insuring mercantile stocks when located in towns and villages, thereby forcing the insured to faithfully keep his accounts in a business-like manner and avoiding friction when called upon to prove his claim.

The others: Universal adoption of co-insurance applicable to mercantile risks and special hazards which would aid not only the premium income by causing increased insurance, but serve as well to reduce that horror of horrors, the loss ratio. The elimination from the business of the "first to pay" advertisement by the marking of claims for liquidation only at expiration of sixty days, especially where the cause of fire is "unknown" and so sworn to by the assured. This has, in many cases in the writer's experience, been found effective in smoking out the suspected "nigger in the fence," and while not always successful, this policy of making haste slowly has acted as a deterrent upon those who are inflicted with weak constitutions and strong insurance contracts. Many a fire, as we all know, has had its origin in spontaneous combustion by placing the policies up against a trial balance. The sixty-day clause is too strong a weapon of defense against intentional fraud to be cast carelessly aside—the more it is studied the more apparent and far-reaching is its great value.

In no other avocation do I believe there is so little co-operation on matters vital to general good as found in the business of insurance. In the matter of rates and rate making there is an approach to concerted action, but try and induce the same co-operation in the matter of adjustments, where graver principles are involved, and your song results in one grand discord. Why? With each company striving to secure for itself advantages over its competitor, and the assured in the unique position of holding the bag for the plums, all the elements combine for what really follows—a regular Kilkenny fight.

How much easier the work of the adjuster would be if it were possible to agree upon some *modus operandi* that would

secure from the companies unification in writing policy contracts eliminating non-concurrencies with its attendant friction and heartburnings on part of brokers. If companies, to their own ultimate detriment, will persist in accommodating plural brokers controlling a desirable risk, each with his own idea of how the assured shall be covered, or left uncovered, then a uniform rule should be adopted governing such contingencies. I speak now in the broad sense, for both East and West have separate and distinct ideas on the subject, neither in accord.

It is perhaps a little egotistical to convey the idea that the work or profession of adjuster stands out among fiduciary connections solely and startlingly alone. In no other business in the world is a man given a draft book and full confidence enabling him to use the same in matters running into the tens of thousands, and this without being bonded. It is an every-day matter for the adjuster of to-day to virtually pay out his tens of thousands and at the close have no person to make an accounting to, unless it be to his Creator or his conscience. How few of them betray their trust is established by the age of the old-timers who have summered and wintered in the profession. The temptations that an adjuster is exposed to are too many to mention. The prayer for divine guidance has been used both by the adjuster and the claimant. The silken skirt and the sly hand pressure is not uncommon. The pleading of the poor devil who has lost his all, or the widow with a home in ashes, are matters of too recent occurrence. The sly tricks of the intentionally dishonest must be met by a shrewdness equal to his own. The expert accountant must find his match in the adjuster. The arsonist must know that the man who is settling the loss is also a detective. The lawyer finds in the adjuster a man frequently more familiar with the law of insurance than he is himself. The companies' representative must be a chemist, a merchant, a banker and a real estate dealer, to say nothing of being a contractor, steam fitter and carpenter. Yet with all these requirements, the adjuster manages to fill the bill; but brilliant as he may be, the crown is without its jewel, the top rung never ascended, if there be the slightest suspicion of the integrity and honesty of the man.

Let us change the worn proverb about Caesar's wife and amend it to read that "the adjuster and special agent be above suspicion," and if it be true that man is known by the company he keeps, then by the same token it must follow that a company is known by the man it keeps. (Applause.)

The President: We have all listened with very much interest to Mr. Koempel's paper, and the Association is certainly under obligation to him for it. There are present here a few gentlemen who consider that they know something about adjusting, and I would like to call upon some of them to discuss the questions that Mr. Koempel has brought up. Colonel Kinne, will you say something to us on the matter?

Mr. Kinne: Mr. President, my days of adjusting are so long past that I hardly think I should be the one to say anything to the Association about the matter. The paper is so broad, so carefully considered, that it hardly needs anything in the way of discussion. There is not a thing that can be controverted anywhere in it. It seems to me that the younger men, the ones that are doing the work in the way of adjustments to-day, are the ones who should try, if they can (which I doubt), to find any point to which they can apply criticism.

We never can get to the point, in our business particularly, where absolute perfection is attained. And the suggestions regarding the iron safe clause and the co-insurance clause, and matters of that kind, are being carefully considered by the practical Executive Committee of the Board of Fire Underwriters.

The matter of how to do things is almost intuitive, it seems to me, at times in the life of an adjuster. You cannot educate a man to be an adjuster, except he educate himself, and he has got to have some foundation for his education before he can accomplish anything in the way of results.

One matter that occurred to me while I was listening very attentively to the paper was the matter of taking advantage of the sixty-day clause which is in all the policies. That, in my opinion, is really impracticable. We have tried that before, and it would not work. It never will. No agreement regarding the matter can, in my opinion, be faithfully carried out. If advantage is desired for any reason on account of any suspicion as to the origin of the fire, or a desire to carefully consider some of the contracts that have not been carried out by the insured,

such as the watchman's clause, or anything of that sort, each company must decide for itself what it will do in the case.

The paper, Mr. President and gentlemen, is so good that I don't want to say much more about it; it speaks for itself.

The President: I wish I could tell you, gentlemen, how much pleasure it gives me to be able to say that I made Chester Deering write a paper. He and I were boys together for a number of years. In fact, we were known as A B C D, and through all the years that I have been in the business, one of the greatest pleasures I have had has been association with Chester Deering, whom I look upon as being one of the sterling men, not only of our business, but of any business he may be in. I only regret that he is not here to read his own paper. But Mr. Kellam has kindly consented to read it to us. It is entitled "Suggestions."

SUGGESTIONS.

Chester Deering.

One evening last summer I was persuaded by the honeyed words of your valued president, aided by the quieting and soothing influence of a good dinner and a big cigar, to trespass upon your time and patience at this time by giving some recollections of the past as well as some suggestions based on experience gathered from years "on the road."

How far into the distant past I am expected to take you is rather an uncertain point with me, for while I can hardly claim to be in the same class with Methuselah, nor have I as yet made any record for longevity, still, Mr. President, when I look back into the past in connection with you, I recall a certain summer day when you, a strange boy, became a resident of the little country village where, in those days I was somebody, and you then had the temerity to send word by a too_willing emissary, that you "could lick that freckled faced kid over there," said "freckled faced kid" being me.

Fortunately your generous offer was never accepted, for some peace-maker or possibly your guardian angel interfered and spared you to occupy your present elevated position.

I am glad to be with you again and among so many of my old friends and associates, and I esteem it an honor to address you, however, I realize that being now a lowly local agent I am no longer of the elect, but it is gratifying after days of wander-

ing, to be at last permitted, like the great law giver Moses, to gaze upon the promised land—and I am content.

I fear my memory has taken me too far into the remote past and my mind returns to more modern times, to the Commercial Insurance Company of California, with Chas. A. Laton, Secretary, and John Cofran head clerk. I see Geo. Tyson at the counter of the Fireman's Fund; Ben Smith also a counter man; Russell Osburn, cashier for Brown, Craig & Co., and well do I remember packing supplies and directing them to B. Faymonville, agent, Fresno, Cal. It doesn't seem so long ago, but in those days there were no typewriters nor telephones, nor many other conveniences that are now necessities; but, I was not asked for my autobiography, interesting and instructive as it might be, and some thoughts and a few hints based upon years of traveling may not be amiss now and possibly may be of some assistance to those who are commencing their road work.

Thoughtful, technical articles are always valuable, but unfortunately the busy special often has too little time or insufficient inclination to profit by them—he cares little for key rates—theories of more or less practicability—relative sizes and heights of buildings in Pekin or Berlin, he soon realizes that his principal duty only is to get business and his ideas on the insurance business resolve themselves into two all important requirements. First, get the business; second, get the money for it. The manager, and too often the Home office will do all the underwriting required.

I would advise a special agent, and in fact any one else in the insurance business, after he has secured a good position to stay with it; don't change. There is always a certain amount of lost motion attendant upon every change. Carlisle says, "All change is wasteful." Agents do not, as a rule, make favorites of, nor do they give their best business to specials who change positions frequently. A few dollars a month increase of salary is certainly alluring, but a new position almost always means harder work, especially at first, and after a change the special is usually disappointed at the small percentage of the old companies' business that he has been able to control and the longer a man handles a field for a company the easier his work becomes.

Become identified with a company; be a part of it; breathe it and exude it from every pore; believe in it thoroughly and your enthusiasm will become contagious. The agents will believe in it and in you, and business will come your way, and

while you are building up the company you are also building for yourself. You can never succeed if you only work in a half-hearted way. Genius is given to but few of us, but hard work, which is the best substitute for genius, will generally accomplish as favorable results.

By all means **be loyal**. You may be called upon at times to pacify agents with grievances, real or imaginary, against the office, for strange as it may seem managers occasionally make mistakes, and all your tact and diplomacy may be required to square things, but be loyal to your manager and to your company. You weaken your cause and yourself by giving vent to any criticisms of your superiors. If you must swear at the manager go to your room and lock the door and do it, but never ease your feelings that way in the presence of the agent or of the public.

Speak well of your competitor. If you can't conscientiously say a good word for him, say nothing. You can never build yourself up by pulling another down.

The first and last and principal task that confronts the special is to get a good volume of good business upon the books of the company; after that is done the retention of same is comparatively easy.

Securing this business means getting "next" to the agents who control it, and this is a problem that has as many solutions as there are agents, and is really a study in human nature. It is difficult to give advice on this subject, for no two men are alike, and the methods employed in one case would likely prove unavailing in another. Circumstances and conditions are to be considered. Each and every man has his hobby, and like Achilles, every man has his vulnerable point; find out what it is and the rest is easy.

Be cheerful and good natured and as optimistic as possible. Hard luck tales are never in order. Be as helpful as possible. The handling of excess lines is becoming nowadays an important question with the local agents. Do all you can to help him and he will appreciate it, and his appreciation will take the form of new risks.

Don't speak of the agent nor introduce him as "my" agent. The pronoun "my" indicates possession, and the agent may be sensitive and resent it. Introduce him as the representative of the Company, and don't say "my" company either.

It is, of course, unnecessary for me to say, don't get "chesty," and especially with the agent.

The position of special agent is an important one, but the agent may not be as deeply impressed with the dignity of the office as you are, and he dislikes to be patronized, or made to feel that he occupies an inferior position; and don't go to the other extreme and permit yourself to be too familiar,—you will be called upon to exercise considerable discretion on this point; some men dislike to be addressed by their first names even after years of acquaintance; some enjoy having their first names used at an early stage of the game. Study his habits and his inclinations, note the class and appearance of the people he associates with, as an index to his character and standing.

Don't be too free with cancellations. Specials sometimes do too much of it and realize their mistake later. If the moral hazard is good, you can afford to take a long chance. However, if a risk is undesirable or prohibited, go to the agent and explain your reasons, request him to take up the policy and see that it is done and don't pass it up to "the office" to attend to it.

Cancellations too often leave a bad taste in an agent's mouth, unless the special handles the situation tactfully. I know of agencies where a company has been shelved by an injudicious cancellation, or a warranted cancellation injudiciously effected. Speaking of cancellations, I believe the premiums or policies cancelled, added to the premiums on other business lost to a company as a result of cancellations, would about offset possible losses by fire had the risks been allowed to remain on the books.

Be systematic and careful in appointing agents; find out about his habits and financial standing. A man with expensive tastes or a large family can't live on the proceeds of the ordinary local agency. He is liable to be slow pay, and finally short in his accounts, and take my advice,—the first time you have trouble in collecting an agent's balance, change the agency, as it is almost sure to happen again, and the next time you may not be so fortunate in getting your money, and think of the work and annoyance attendant upon the collection of a bad account.

When you plant an agency do so with a view of permanency. Local agencies at best are short lived. I believe someone with a taste for statistics has figured out that their average duration is about five years. Remember that lawyers are only agents until they can build up their law practice sufficiently. School teachers seldom make good agents, and generally are only short lived appointments.

Take your time and get the right man and don't appoint

until you are satisfied, and if you can't get the proper man on your first visit to the town, wait until your next.

When you visit an agency aim to clean up everything that is to be done, by so doing you will save the manager much correspondence.

After attending to your duties in a town you will frequently have several hours to spare, waiting for a train. You can always utilize this time to advantage. Inspect all the special hazards, whether you have lines on them or not. You are liable to secure lines either direct or as reinsurance, and the information you obtain is always useful to yourself and may be valuable to the office. Make map corrections and diagrams of new risks. They are always an aid to the mapping clerk.

Get acquainted with all the agents of the town. Visit the country newspaper editor. It is not often that he is too busy for a chat with you. Unfortunately there is too often an unfriendly feeling towards the insurance companies on the part of the general public, caused largely by ignorance or thoughtlessness, and the press is a powerful factor in molding public opinion. Get acquainted with the editor; smoke a cigar with him. You may be the means of his forming a more favorable opinion of the insurance fraternity and the insurance business and through him the public is made to see the light, and who knows,—frequently he goes to the Legislature and may become a very useful ally in the days of valued policy and anti-compact laws.

Study the insurance contract, which is the policy, familiarize yourself with its contents and learn the meaning of every line. Clement has recently written a very complete and instructive work on this subject.

Watch the construction of buildings; note the size of timbers, etc., and the method of construction, for you cannot claim to be an adjuster until you can figure the cost of an ordinary building, and it is a very easy thing to do. Post yourself on the cost of labor, materials, etc., and a little careful observation will soon enable you to master this part of the business.

Be friendly with your brother special agents. They can and will help you in many ways if they like you, and the more friends you have the better, for personality is the chief factor of success on the road, and personality is largely the faculty of making and retaining one's friends.

For Heaven's sake don't burden the manager with long letters, telling what you expect to do and what you hope to accom-

plish, etc., for your plans are liable to miscarry and your expectations fail, as is too often the case and that requires another long letter, explaining the whys and wherefores, and such explanations are not pleasant.

When you have done anything, report it briefly, for the manager's time is too valuable to be devoted to reading long-winded essays.

I am almost tempted to make a suggestion or two to the manager but such conduct would be presumption on my part and unpardonable.

I have spoken of the past and but briefly, for we are not living in the past but in the present, and one's face should be turned toward the future, for the world moves swiftly and conditions are changing constantly, and methods and theories reverently clung to in the past are apt to be out of date in the present and entirely obsolete in the future. We must hustle to keep up with the procession and not permit ourselves to sit on the fence and allow it to go by. However, human nature doesn't change, and the good old methods of making and holding one's friends are the same "to-day, yesterday, yea, and forever."

Do your work thoroughly and well. Make friends with the agents and your associates; master your business and familiarize yourself with its details; touch the booze lightly; don't waste your time, and your task will become an easy one, and then the time will soon come when you will be a Class A special and in that enviable position, like Monte Cristo, the world will be yours. Your services will be in demand, your expense account will be regarded leniently, your salary will assume generous proportions, and doubtless in time you will be called upon to counsel with the wise men who sit at the gates of the city, and when the melon, known as the contingent, is cut, you will partake of a goodly slice. (Applause and cries of "Good!")

The President: Mr. Deering goes pretty well back into the past. We have another man who is to tell us of the past. Perhaps very few of us know that Mr. Samuel R. Weed of the well-known insurance firm of Weed & Kennedy of New York was, in his boyhood days, a resident of San Francisco; that he came here very shortly after the days of '49, and resided here for some time after that. When I was in New York I asked Mr. Weed, who seems to have a remarkable memory for men and facts and figures of those days, if he would write a paper for this

Association. He demurred at first, saying that he did not believe that it would be interesting, that those facts and figures were out of date, and were only really interesting to those who were here at that time. But I believe that when you hear Mr. Weed's paper, which Mr. H. L. A. Bates has kindly consented to read for us, that you will be quite inclined to disagree with Mr. Weed.

EARLY EXPERIENCES AND RECOLLECTIONS OF FIRES
AND FIRE DEPARTMENT IN SAN FRANCISCO.

Samuel R. Weed.

The President of your Association has done me the honor to request an address to be delivered at the next annual meeting. I regret my inability to be present with you on the occasion and recount in your presence some of my early experiences in San Francisco. I am obliged therefore to substitute this written paper in place of a personal address.

The mere mention of those early days revives a host of memories which seem to pass before me like a panorama, or I might say a moving picture of events which have long since become part and parcel of the history of a wonderful period. Fifty-six years is a long span in the march of time, but it is even more than fifty-six years since I first landed in San Francisco, a mere stripling of a boy less than fourteen years old.

I arrived in the city in January, 1851, with my mother and sisters after a trip via the Isthmus of Panama, and at the end of a tedious and uncomfortable voyage of thirty-one days. This was considered rapid transit in those days, and so it was, remembering that the old Carolina, a Pacific Mail steamer of 600 tons, commanded by Captain Whiting, lost her rudder when within one day of Acapulco and was detained three days in repairing it. I well remember how Captain Whiting (who was a few years later Commodore of the Pacific Mail fleet) managed the repairs by putting the stern of the steamer at high tide on the beach, a very easy and convenient dry dock improvised for the occasion. On our arrival in San Francisco the Carolina was anchored about midway between Goat Island and the end of Long Wharf. My father met us in a small boat and we were soon rowed to the landing stage, which was not far from Battery street. After our luggage was piled on a wagon we weary pilgrims, young and old, walked up the wharf and wondered at the scenes, so different from those in New York we had left behind us. We footed it to

my father's temporary abode, a two-story building with a store downstairs and rooms for living upstairs, which was located on Kearney street between Pine and Bush, on the identical spot where the famous Maison Doree stood a few years later. On the north was a blacksmith shop and a one-story shoeshop. On the south the ground was vacant all the way to Bush street. It seemed to my youthful vision as if we were about to settle in a wilderness of sand and brush. The surroundings surprised my young eyes more than I can describe. So many novel sights were in view that it is confusing to try and remember them all, but some of the novelties are still fresh in my mind, for instance, water carts delivered water at the front doors and cows were often milked in the streets in appropriate proximity to the water carts, but the jangling milk cans on each side of a donkey supplied most of the milk.

I had boyish curiosity allied to more than a boyish ambition to succeed at that time, and four hours after we came ashore I had applied for a job and got one upon one of the Clark's Point wharves, checking off the marks of the packages landed from a clipper ship just arrived from Boston, for which service I received one dollar per hour—to be accurate, \$5 for five hours' work, a princely sum to my boyish imagination. From that moment onward during eight and a half years of life in San Francisco I was never without employment at paying wages, and most of the time big wages for one of my age.

Perhaps I may be pardoned for relating an incident in my early business career which shows what a boy of fifteen could do in San Francisco at that early period. In November, 1852, I was elected sergeant-at-arms of the Board of Assistant Aldermen at a salary of \$150 per month, and a few weeks later appointed to an annex position as assistant clerk of the Common Council at the same salary. Think of \$300 per month for a boy of fifteen! How did it happen? Well, I was an office boy in a newspaper office, the San Francisco Whig, of which Frank M. Pixley, later of the Argonaut, and Louis R. Lull, for many years the secretary of the California Pioneers, were the editors. The Whigs gained the election in 1852, and the "office boy" of the only Whig paper, hearing the subject of "office" discussed in his presence, took it into his head to try for some of the loaves and fishes when the basket was passed. The idea was my own, but I had the assistance of my bosses. But I am sorry to say neither they nor I could command a majority of the Whig votes among the Aldermen, which were my chief dependence. There were

six Whigs and two Democrats in the Board, and I could only muster three Whig votes, but I carried the Democrats in triumph and was elected. One of the Democrats was Tom Hayes of the Mission Ward, afterward County Clerk.

CONFLAGRATIONS.

Perhaps this story is too personal to be counted as a local recollection, but that was my only entry into politics, and as I was less than seventeen when I retired, you must bear with me for making it so prominent. I need not remind myself that there was not much of a Fire Department in those days, but there was a mighty need of one. The city was built mainly of wood; there were very few brick structures until 1851, and it needs no imagination to recall what a fine collection of kindling wood was thus prepared for conflagrations. The water supply was hardly worth the name; reliance on the bay was the only comfort, and it was not until the severest conflagration, that of May 4th, 1851, which I saw (and can never forget) that any great advance in providing cisterns for the future emergencies took place. It is a weird story now to recapitulate those early destructive fires, but to the pioneers there was something so disheartening and discouraging that it is no wonder the talk was common in 1851 of removing the city—not to Seattle or Oakland or Portland, as in 1906—but to what spot do you think? Why, to sleepy old Benicia, on the Straits of Carquinez, and to turn that suggestion into a reality, wharves were built at Benicia, the Mail Company built repair shops there, and the steamboats to and from Stockton and Sacramento all made landings for freight and passengers. That was considered as the opening overture as it were in the programme for transferring the trade, commerce and population of San Francisco to Carquinez Straits, but it didn't work any more in 1851 than the ambitious schemes fifty-five years later after the awful catastrophe of last year, worked the removal of dear old San Francisco to the north or south. Not less resolute then than now, the men of San Francisco proved that if their stores and offices and dwellings were not fireproof, their owners were men who could withstand fire as well as 'quake. The boundaries of the city in my day were restricted to Larkin street on the west. The water line ran up to Montgomery street between Jackson and Washington, and in a curve northeast to Sansome street, then northwest to North Point. To the southeast the shore line ran about parallel with Montgomery street to California street, and then slanted to Battery at Bush street and became part of old Rincon Point line. There was a limited manufacturing and resi-

dential section south of Market street along First street, but the residences mainly followed the westward direction, as later on. The hill sections made gains in dwellings long before cable roads or trolleys were thought of. The business section was chiefly below Kearney street between Pacific and California street up to 1852. The brick buildings, though few in number, on the Plaza, California, Commercial, Clay, Washington, Montgomery and Sansome streets, took in what were known as the best of the wholesale stocks. Four-fifths of the business was done in frame buildings. The so-called great fires in San Francisco followed each other in quick succession, and the two greatest were on the same dates of the two years, May 4th, 1850 and 1851." The first of the conflagrations occurred on the day before Christmas, 1849. It consumed the most flourishing portion of the town. Dennison's Exchange on the Plaza, where it began, was a light wooden building which was ceiled with cotton cloth, freshly painted. Once the fire was started it ran through the building like a gunpowder flash. It spread so rapidly that it defied all control. The loss was computed by the local historians at \$2,000,000, but this was a staggering sum for a city of less than 15,000 people. In four months the burned district was all rebuilt in even better buildings than before, but all of frame except two. On the fourth of next May the second great fire began almost on the very site of the first, and in a few hours swept away four blocks with an estimated loss of \$5,000,000. In less than ten days after more than half the burned district was again rebuilt, and in the succeeding six months a very respectable attempt was in progress to construct a brick city. There was an abundance of lumber and a very considerable quantity of brick available soon after the second fire, but the event which gave impetus to the rebuilding was the tremendous energy of the people. It was more plentiful than even lumber and brick. The work of rebuilding had hardly made much progress, however, when the third great fire again distressed the already blackened city. This fire broke out on June 14, 1850, in a bakery on Kearney street between Sacramento and Clay, in the rear of the old Merchants' Hotel. It swept to the water's edge, including the buildings over the water, and consumed everything in its path, including some of the rebuilt section. The total loss was estimated at \$8,000,000, and it is recorded that "many citizens previously regarded as wealthy were reduced to poverty." It was this fire which produced the first real improvements in the general construction of buildings. There was a loud call for fireproof buildings, but

unfortunately the materials and the knowledge required were absent, although there were some remarkable successes achieved even under difficulties. While these good intentions were discussed and means provided for carrying them out, a fourth conflagration visited the city. It began September 29, 1850, in a wooden hotel called the Philadelphia House, on the north side of Jackson street above Kearney, and soon destroyed the square bounded by Jackson, Kearney, Pacific and Dupont streets, with the exception of one building. Then it crossed Jackson street and swept everything before it up to the Plaza, leaving the Alta California office and two brick buildings the only salvage. It crossed Kearney street and burned a portion of a block. The losses by this fire were not as heavy as in the previous conflagrations, and many of the buildings were mere shanties. They were or could have been replaced for much less than their first cost.

THE FIFTH GREAT FIRE.

The fifth great fire was that of May 4, 1851, the anniversary fire as it was called. It is necessary to digress a moment to refer to certain conditions of the public mind and their effects to understand the peculiar horror which came upon property owners and citizens as the result of the three fires of 1850. The city had been oppressed by the conviction that incendiaries were at the bottom of the previous conflagrations. There was an actual dread of the very thing that happened, viz: a recurrence of the May 4th fire. Threats had been made, it was said, that the city was to be destroyed. Rumors to that effect were circulated, whether well founded or not. The infamous gang of ruffians, generally known as "Sidney Coves" or "Sidney Ducks," from the fact that large numbers of the lower classes had arrived from Australia at the expense of the colony, in pursuance of what was believed to be a settled policy on the part of the Australian colony to dump the worst dregs of their convict population upon the California Coast. This was thoroughly believed at that period, but was a mistake so far as any official action of the colony was concerned. However, the infamous gang of ruffians which infested the city were known to have profited by the loot of previous fires, and were desperate and vicious enough, it was believed, to start another fire or any other heinous thing. With this feeling prevalent, the dreaded 4th of May approached. The close of the previous day had been marked by a sunset glow of unusual magnificence. Thousands assembled on the

street to admire it. To my youthful eyes it seemed as if nothing could be more magnificent. That night I was sleeping soundly in one of the old-fashioned bunks so common at that period when a mighty roar aroused me from my slumber. It was midnight and an awful fire was raging. It broke out in a paint shop on the south side of Clay street, one or two doors below Dupont street. The aid was calm and still, in the beginning, but in a few minutes the wind was a roaring hurricane and the fire was devouring buildings and contents in its onward march. It spread east to Kearney, north to Jackson, east to the water's edge and the wharves as far as Battery street, south to California and back to the water's edge to Sansome and Pine streets, back by an irregular line to Kearney and to both sides of Sacramento street and nearly to Dupont. This fire was fought with the limited means at command as vigorously as human energy could fight anything so powerful. The engines were few, and two of them were lost by the destruction of the shore end of the wharves on which they were stationed for use, and left stranded on the outside ends. That fact put them out of commission. I was an eye witness to the excitement with all of a wide-awake boy's activity and a strong desire to do something to save property. Only a week before I had accepted a situation in a hardware store in a two-story brick building on the south side of California street where the California market stood later. It was owned by Jennings & Brewster, who subsequently became Standard Oil millionaires in New York. My first impulse was to fly to my employers and help remove books and portable stock to a place of safety. I made a beast of burden of myself carrying heavy books on my back to the yard adjoining my father's house. Three times I covered this trip. The fourth time I stood on the alley side of the brick store and witnessed a wonderful event. Directly opposite the store stood a frame theatre known as Dr. Robinson's Hall. It was soon a mass of fire. The street was, as you know, wider than the average and there was a hope the flames might be prevented from crossing it. Suddenly there was an explosion and a body of flame shot horizontally across the street and struck the Jennings & Brewster building with the impact and force of a cannon ball. The front wall was forced inward and the sidewalks collapsed. That was the end of a fine Class B brick building, in spite of iron shutters and coped walls front and rear, and my job was gone. I stayed around gazing at the ruins and then wandered toward Montgomery and Sacramento streets where a great battle with

fire was being fought, and where a tremendous effort was being made to save an iron building on the northwest corner known (I am writing wholly from memory, but am quite sure I am correct) as Taafe's Dry Goods store. There were a half dozen men in this building using water from a well and with saturated blankets defying the sea of flame on the outside. It was a heroic struggle, but in vain. The iron walls collapsed with the heat and carried down five brave men in the wreck; only one escaped. I need not linger on these horrible details, but cannot neglect to say that several brick buildings were saved in 1851 which succumbed in April, 1906. One of them was the old El Dorado building, used as a gambling house, on the Plaza corner of Washington street adjoining the old Jenny Lind Theatre, a wooden structure. Next the Bella Union, a concert hall and gambling house on the north side of the Plaza the second door from Kearney street, was another of the saved. The old Wells Building, a four-story brick building on the southwest corner of Clay and Montgomery street, which was used for stores and offices, also survived the flames. There was an unpretentious three-story brick building on Commercial street occupied, I think, by Cross & Co., an English firm. I have no data at hand to verify these names, but am trusting wholly to memory which I may say has seldom failed me in the past. Then there was a fine brick building on Sansome street between Pacific and Broadway occupied by the old firm of DeWitt & Harrison (the fore-runner of DeWitt, Kittle & Co.) as a wholesale grocery house. It was filled with a valuable stock and was saved from destruction by the use of blankets taken from a neighboring hotel or lodging house and saturated with vinegar drawn from sixty odd barrels which were part of the stock. It used to be said "the firm put out the fire by cornering the vinegar market."

AMOUNT OF LOSS.

I have never heard the losses by this fire more than roughly computed at \$25,000,000, and suspect it was largely guess work as to amount. But I believe relatively it was as destructive as the fire of April, 1906. It was confined to eighteen blocks, but consider that the city's population was then less than 40,000, and that the buildings outside the burned district were chiefly one or two-story dwellings and that probably 80 per cent of the wealth of the town was concentrated in those eighteen blocks. Consider that this was the fifth disastrous fire which swept away millions and this was the worst calamity of

all. San Francisco had indeed been the world's wonder. There is no similar instance perhaps in the history of civilized society where so much had been accomplished in so short a space of time. The people were dazed, but not cast down, and like the Apostle of old, thanked God and took courage. They realized then, as your people have realized now, that the causes of this prosperity, the magnificent resources of the fertile valleys, the inexhaustible treasures of the mountains and river beds and an indomitable energy that knew no such word as fail, still remained. They met the calamity like men, but there was something appalling in the array of \$25,000,000 blotted out in a single night. But they did not stop to regret or recount their losses. Several ships were at the wharves unloading and several others in the harbor awaiting a chance. The people did not stop for relief funds but began to rebuild at once, and within ten days the local historians state that 250 new buildings had been erected and occupied. Through all this exciting period of alternating stupor and energy, the thought of another anniversary of a great fire, that of June, 1850, oppressed the people. Again it was whispered the lawless element had threatened to keep this anniversary. This threat was stimulated, it was thought, by an important event in restraint of lawlessness in the city. On June 12th, 1851, a former convict, one Jenkins, was caught redhanded in a burglary, and between 9 P. M. in the evening and midnight he had been arrested and tried by the first Vigilance Committee and hanged to one of the cross beams of the old Alcade Office and adobe building on the west side of the Plaza, or Brenham Place, within 100 feet of Washington street. This event gave great satisfaction to the better classes and in a certain sense, they defied the miscreants whom they previously feared and whom the regular authorities seemed powerless to control. It also stifled the rumors of intended incendiarism on the fateful June anniversary, the 14th inst. Great vigilance prevented any attempt to start a fire that night and the people were lulled into a belief that this danger was over. Alas! the sense of security was a fiction. On Sunday, the 22nd of June, 1851, the sixth great fire broke out. This time it began in a one-story dwelling on the corner of Pacific and Powell streets. My father after the May fire, had purchased the property on the northwest corner of Broadway and Powell street as a residence, and we were all at home when the fire alarm was given and the fire was only a block from our new home. I well remember the panic in our neighborhood. This was the

dwelling section and the place of corner shops. The buildings were of lightest kind with stovepipes through roofs and side walls, and it was said the adobe chimney in our house was the only one in the ward, which was another bit of fiction. This fire ran rapidly from Powell and Pacific streets toward Broadway, thence eastward to Kearney, and by zig-zag line to Sansome and Pacific streets, back to Montgomery and Jackson and along Montgomery to the north side of Clay and the Plaza to Washington and Stockton streets, back to Jackson and thence to Powell. Not actually in the course designated, for it seemed as if the fire ran in all directions at once after it started, save that it never got to the west side of Powell or the south side of Clay street, but the boundaries were as I have stated. Sixteen blocks were wiped out, including the section of Montgomery street then partially rebuilt on the ruins of the May 4th fire, between Clay and Pacific streets. The Plaza was the scene of terrible horrors, where not only goods that were removed from dwellings for safety were consumed, but patients from the City Hospital and the sick from nearby hotels were taken there on cots for safety, and were shortly after surrounded by burning household effects and eventually several of them burned to death. There was no doubt that this was an incendiary fire. It was proved no fire or light had been used in the building where it originated, for any purpose whatever. The uppermost thought in the public mind for several days was that property valued at \$6,000,000 had been destroyed and hundreds turned homeless into the streets merely to gratify the hatred or love of robbery of a few scoundrels. This fire was not so severe upon commercial interests as upon the homes of the people. It was calculated that one-fifth of all the dwellings in the city were consumed. This was probably an exaggeration, though my own recollection is that there were more vacant lots than houses all the way from Broadway to North Beach on Stockton and Powell streets, while south of Broadway they were quite compact. There is no doubt this conflagration, which was in reality the last of the great conflagrations, drove thousands of the middle classes and some well-to-do citizens temporarily at least out of the city. I know from personal observation how the steamboats to the Sacramento and Stockton and Pablo Bay ports, as well as the Oakland ferry, were crowded for weeks with departing population. But bye and bye the spirit of progress returned and the city started on its new career, yet it was to be practically rebuilt from Powell street to the bay and from Pine street to Broadway. Only Telegraph Hill

and the steep sides of Russian Hill held the fire in check. Shortly after the development toward the Mission fairly began.

VIGILANCE COMMITTEE.

It must be noticed that the outcome of the last fire was to reinvigorate the activity of the Vigilance Committee, which sprang into being full armed on June 12th, when the man Jenkins was hanged. There was public notice to criminals to leave town, and that all suspected premises would be searched and suspected individuals arrested. A stirring proclamation was issued by the Vigilants reciting these demands, which ended with the ringing declaration "And further deeming ourselves engaged in a good and just cause, we intend to maintain it!" On the 11th of July there was another hanging, this time of a man named James Stuart. He confessed his crimes. He was an English ex-convict from Australia, a veritable "Sidney Cove," indeed. He was hanged from a derrick on Market Street wharf about where Front street joins it now, one block from the water line. On the 24th of August there was a double execution by the Committee from the lofts of the stores on Battery street between Pine and California streets. The criminals were Samuel Whitaker and Robert McKenzie, who had been arrested a month before and had confessed their crimes. Nobody doubted the justice of their punishment. In consequence of these examples crime was now fast diminishing, and the number of notorious criminals was much reduced. The sense of security to person and property returned once more and the fear of incendiaries subsided. Then the labor of rebuilding was redoubled. The Vigilance Committee disbanded, but never dissolved. It was the nucleus left after the affair in 1851 which gave strength to the uprising in 1856.

But you may wonder why through all these stories of six great fires within a period of eighteen months no mention of a fire department has been made. I have already intimated the absence of water and water facilities. I well remember in June, 1851, delivering water from the fine well which was in the rear of my father's dwelling to the neighbors on the block at twenty-five cents **per** **nail**, and handing to my beloved mother many dollars earned from my youthful water service. That simple fact will illustrate the scarcity of water for drinking purposes, how much greater was the scarcity for fire purposes. Still there was a beginning of a fire department long before there were cisterns or running water. The water of the bay was always available, and thus it may be said San Francisco had a salt water service long before New York, or before 1908. The first steps taken to

organize a fire department date from Christmas day, 1849. Meetings were held by numerous influential citizens who had been old Atlantic firemen, among whom were Frederick D. Kohler, David C. Broderick, Geo. W. Green, Geo. H. Hossefross, William McKibbin, Benj. Ray, Chas. W. Cornell, John A. McGlynn and others. Truly it causes my blood to run quicker to write down these names of the pioneer firemen. I knew them all in later years. They were all honored and respected citizens. We may well afford to cast our laurels upon their graves now. There were only available in the city three engines and these of an antiquated type (from our present standpoint), and they were without adequate hose. But they served as the beginning, and three companies, known as the "San Francisco," "Empire" and "Protective," were formed and brought into active service in the fires of May and June following. The day after the latter fire meetings were called to organize more companies and procure better apparatus. As a result the City Council by July, 1850, provided by ordinance for the organization of a fire department and made an appropriation for engines. Frederick D. Kohler was chosen Chief Engineer and Edward A. Ebbets and Thos. K. Battelle, Assistants. The companies enrolled were the Empire, Protective, Eureka, Howard, Monumental and California, together with St. Francis, Howard and Sansome Hook and Ladder Companies. The construction of cisterns and reservoirs was ordered, but delays of engineering occurred, so that the water supply was insufficient until the autumn of 1851. Everybody realized the want of water, and the energies of the authorities were bent in supplying it. There was ample material for organizing an efficient fire department and providing admirable officers, but the want of superior apparatus was keenly felt. The Second Chief Engineer was Franklin E. R. Whitney, the Third Geo. H. Hossefross, who held office until December, 1853, and was succeeded by Charles P. Duane, and henceforth the chiefs were elected regularly each year. At the risk of becoming tedious I will briefly recall the fire companies as they were organized up to 1854.

ORGANIZATION OF FIRE COMPANIES.

No. 1 was the old Empire one of the pioneers. David C. Broderick was its first foreman, and the company was always in the front rank when work was to be done. The name of David C. Broderick is closely linked with the pioneer history of San Francisco, and in no capacity did he do himself greater honor or perform more faithful public service than as the first foreman of

old Empire No. 1. The company imported at its own expense a New York side lever engine, and their home was on Kearney street between Sacramento and California streets.

No. 2 was originally the "Protective," and later the "Lady Washington," both of which in turn did fine service with the poor and defective apparatus in their charge. Later, in January, 1854, these companies were disbanded and a new organization known as Manhattan became No. 2. They used at that time a New York side lever engine and hose cart, and their home was on Montgomery street adjoining the old Metropolitan Theatre, near Jackson street.

No. 3 was that grand old company, the "Howard," organized in June, 1850, by a number of old Bostonians, to whom a well-known public-spirited citizen, Mr. W. D. M. Howard, presented a fine new Hunneman engine, imported from Boston at his own expense. The company was named "Howard" in compliment to the donor. This company rapidly developed and soon owned a fine brick house with stone front on Merchant street between Montgomery and Sansome streets. Frank E. R. Whitney was foreman for many years.

No. 4 was the "California," organized October 10, 1850, by prominent citizens living south of Market street. It was called at one time the "Millionaire Co." At first this company used the old San Francisco engine, but in 1852 imported a new engine of the Hunneman type from Boston. Its house was a landmark on Market Street square, opposite Bush, and its bell tolled the signals of the Vigilance Committee in 1851 and 1856.

No. 5 was the "Knickerbocker," organized October 17, 1850, by James H. Cutler, Charles E. Buckingham (who was called the Adonis of the department) and others. They imported a piano box engine and enjoyed the distinction of being burned out of their own house on Merchant street in November, 1852. They then built what was at this time the finest engine house in town and occupied it in July, 1853. They brought out from New York a handsome mahogany piano box engine in December, 1852, which was regarded as the handsomest in the State at that time.

Nos. 6 and 7 were known as the "Monumental," and represented three companies on the Baltimore plan, as an independent association. They ordered three old engines from Baltimore known then as the "Mechanical," "Union" and "Franklin," which were shipped to the Coast via Cape Horn. The leading spirits of the "Monumental" Company were Geo. H. Hossefross, Robt. B.

Hampton, John S. Wethered, Jos. Capprise and J. H. Ruddack, all of them old Baltimore firemen. As the City Councils could not recognize independent companies, they refused to appropriate money to their use. There was a squabble among the companies for a while, but on September 13, 1851, the companies voted to join the general organization. They received as their numbers 6, 7 and 8. The first President was William Divier, and Geo. H. Hossefross, Chief Engineer. In January, 1853, they resigned the No. 8 and ran two companies, 6 and 7, but in April, 1854, they consolidated under one number, 6, and provided themselves with a mammoth engine of the end on end levers. Their home was on Brenham place facing the Plaza, and was surmounted by a bell which sounded out those mysterious signals for the Vigilance Committee calls. This bell has a peculiar recollection for me. As I sat in the Overland coach in front of the El Dorado on May 2, 1859, this bell rang out the noon hour, and our stage started down Kearney street and onward to the Mission. Thus this bell was the signal for beginning for me a stage ride of twenty-two days and nights over mountains, valleys and plains, and which only ended on the banks of the Missouri River, May 24th, where I changed to a railway car 125 miles west of St. Louis. Do you wonder I remember the old Monumental bell? As No. 7 was unorganized after 6 and 7 were consolidated, subsequently a company known as Volunteer took that number.

No. 8 was the "Pacific," organized in September, 1853, by citizens living near the vicinity of Pacific wharf and Broadway, and was a long time procuring efficient apparatus and equipment. Its home was on Front street near Pacific, in a neighborhood especially demanding fire protection, owing to the rapid building of warehouses to receive cargoes unloaded near by.

No. 9 was the "Vigilant," organized April 8, 1852, and which (boy as I was) I joined in January, 1853, and did many an hour's hard labor on the old side levers. It was organized in the new residential section on Stockton street, and was officered by Captain Martin R. Roberts, William H. Bovee and Isaac D. Bluxome (later known as "33" Secretary of the Vigilance Committee days of 1856). Mr. Bovee was one of the Assistant Aldermen who was my father's neighbor, and had helped to elect me Sergeant-at-Arms, as previously stated. I think the proudest moment of my life (up to that time) was when I was permitted to wear a red flannel shirt and a fireman's hat on a Fourth of July parade of 1853, in which the Fire Department in all its glory of polished

brass, fresh uniforms and wreaths and flags common to such occasions, paraded. That was the romance of the old Fire Department. The reality was turning out of bed at 1 or 2 o'clock in the morning and hauling a hose cart or engine an eighth, a quarter, a half or a full mile through the sand, often impassable, and then working the brakes for an indefinite period and feeling used up all the next day. But I had enlisted for the war, and if I didn't do a man's duty I am sure it was a full boy's share. Probably I had an easy time compared to the downtown boys, but I have never ceased to feel proud of my connection with old "Vigilant" No. 9 in 1853 and 1854.

No. 10 was the "Crescent," organized in November, 1852, down toward the wharves on Ohio street between Pacific street and Broadway. In 1854, when this history ends, the "Crescent" had in use a new engine of the New York type, and had a reputation for celerity and prompt arrival at the nearest cistern unequalled by any company in the department.

No. 11 was the "Columbian," organized in November, 1852, and known as the "Dan Tucker Co.," because Daniel N. Tucker, J. D. Brower and other citizens were its founders. They brought out a new piano box engine with patent running gear and playing double streams, which proved very efficient. It used to be said the Columbians put out more fires single-handed than all the others combined. They certainly made a fine display on parade by their bright and handsome apparatus, and were not backward in coming forward when the fire bell rang.

No. 12 was the "Pennsylvania," which was organized November 4, 1852, and soon became one of the most famous and popular companies in the city. Among its founders were Robert B. Quayle, E. T. Batturs (known by everybody as "Ned Batturs"), John Hanna, Geo. K. Gluyas, Harvey S. Brown and others. They located on Jackson street between Kearney and Dupont. They first used the old Franklin of Philadelphia, but in 1854 they ordered a new engine built by Agnew of Philadelphia, which was intended to be in competition with the new Monumental, then building in Baltimore. Their uniforms were in Philadelphia style with capes, and were very showy as well as useful. A story was told about this new engine which illustrated the liberality of the citizens of San Francisco toward the perfection of their Fire Department equipment. When the engine was ordered a draft for \$5,000 was sent in advance to pay for it. Later the friends of No. 12 thought the amount insufficient and forwarded another draft for an extra \$2,500. The

economical Philadelphia artisan, already at a loss how to expend upon his contract the first apparently enormous sum, now asked for information as to what was to be done with the second remittance, as he did not know how to use it. The answer was mailed back by the first steamer "Convert it into silver or gold and stick it on anywhere." It was said the idea was to have the finest engine in town at any cost.

No. 13 was the "Young America," organized January 1, 1854, by the citizens living at the Mission Dolores for the protection of property in that vicinity. They were content for a few months with a second-hand machine, but finally obtained one of the better ones of other companies which had been surrendered when replaced by newer engines.

HOOK AND LADDER COMPANIES.

There were also three Hook and Ladder Companies:

St. Francis No. 1 was organized June 14, 1850, by E. V. Joice, Samuel H. Ward, Jos. C. Palmer (later known as the head of the famous banking firm of Palmer, Cook & Co.), B. G. Davis and Geo. W. Gibbs and others. They did an enormously effective work pulling down low frame buildings in the fires of 1850 and 1851. Later they built a fine brick building in which to house their apparatus on Dupont street between Clay and Sacramento streets, in the heart of what later became Chinatown.

Lafayette Hook and Ladder Company No. 2 was one of the most unique fire fighting organizations in the city. It was organized in September, 1853, by H. A. Cobb, Emil Grisar and a number of French citizens. Nearly all its members were former French firemen, and their organization was on the French plan, with a military drill and a variety of movements quite unlike any other company. The discipline was very strict and their service was soon recognized as beyond reproach even by those who were at first skeptical of "the funny Frenchmen," as they were called. Their home was on Broadway between Dupont and Stockton. This company was particularly popular with the ladies of the city on parade days.

Sansome Hook and Ladder No. 3 was the third company, organized in 1850 by Alfred DeWitt, J. L. Van Bokkelen, Horace Mahoney, E. H. Ebbets and others. They took the name of the street which it is said they were especially pledged to protect. This truck, up to 1854, was the largest in the State, and it was a source of great pride to the officials of the department that the Sansome truck carried ladders 50 feet long. There were no skyscrapers in those days, and 50 feet was regarded as more than

enough. Part of the equipment was rather peculiar. This company by virtue of the authority granted to it by the City Council took charge of the public powder magazine intended to be used for blowing up buildings in case of need. No other firemen had this privilege. Though pledged to preserve Sansome street particularly, their new building (which with its furniture cost \$44,000) was located on Montgomery street between Jackson and Pacific streets.

The entire department had up to 1855 annual parades, which were invariably a source of pride and gratification to every citizen.

Nothing needs to be added to this account of the earlier fire fighters of San Francisco save to say that with limited water supply from cisterns and later from the earlier attempts to supply water in endless quantity the firemen improved in discipline and efficiency. As a body they were never excelled for active service by any similar body of men anywhere. There were many acts of heroism in saving imperilled lives which received grateful public recognition. Their successors have done well, but the introduction of steamers completed the labors of the volunteer force. Their memory should be respected and their unselfish devotion to San Francisco never forgotten.

I wish it were possible for me to follow up this account of the early fires and early fire department records with an accurate story of the earliest underwriting history pertaining to this city. I have unfortunately no data at hand, so far away from San Francisco, to fix accurately the date when underwriting actually began in the city. I was not especially interested in the profession when I left the city in 1859, and my impression is that there were only the beginnings at that time. When Commodore C. K. Garrison was Mayor his business office was with his bank (Garrison & Fretz), which was also the office of the Nicaragua Steamship Line in 1856, located on the corner of Sacramento and Leidesdorff streets. I recollect the sign board of two Philadelphia companies on the doorpost of the bank about 1856 or 1857. One the companies was, I am sure, the old Quaker City Fire. I have no certain recollection of the other, but think it was either the Franklin or the old Fame, but must admit my recollection as to the names is quite hazy and indistinct. I was not interested at that time in either the names or location of insurance companies. During the early years, while I was serving the City Council, I became well acquainted with the late Joshua P. Haven. He was President of the Board of

Aldermen, and I have spent many an hour standing by his side watching his well-rounded autograph upon the official papers I brought to him for signature. I have a dim recollection that he was interested in marine underwriting or average adjusting, and was the first agent of the Liverpool & London & Globe. As that splendid old company is still represented by one of the Haven family, I am wondering whether this is a case of a family inheritance of an honored name and occupation or only a coincidence. Joshua P. Haven was an able man in any vocation. He had that natural ability which adapted itself to anything in hand. If he had agreed to manage and pilot a Chinese junk in a yacht race in the harbor I would have believed he would succeed. There were no trained underwriters as we count them now. The Liverpool & London & Globe made no mistake in taking Joshua P. Haven from the ranks. If I have blundered in this statement I must ask your indulgence. But I do remember a small tin sign which was on the doorpost of an office on California street near Sansome. I think it was an auction house. This sign bore the name of the Hamburg-Bremen Insurance Company, Morris Speyer, agent. I heard a few years later that some members of the Speyer family in Hamburg were shareholders in the company, and that their beginning on the Coast was the home office policies written on merchandise which was owned by Morris Speyer in San Francisco. As he had made known the fact to some of his merchant friends that he was safely insured, they requested him to procure protection upon their property. The memory of May 4, 1851, was fresh in their minds, and sensible of the importance of fire insurance, they were eager for policies. This led to a correspondence with Hamburg, and finally to a policy writing agency under Morris Speyer, which under various forms has continued. Until 1870 the company confined its business to California. The Chicago fire created a demand for more companies, and the Hamburg-Bremen planted its first outside agency in that city, and subsequently in New York. Morris Speyer, I am informed, retired to Hamburg on a comfortable fortune. Subsequently he met with financial reverses and returned to California, but I have heard he resumed the business in connection with Mr. Herold. Prior to 1858 it was related of him that he once said in answer to a question about the organization of the Hamburg-Bremen, "I am the company—what more do you wish to know?" In this speech he antedated a class of agents quite numerous in the East, who imagine they are themselves the company (in fact, the whole thing), and

endeavor to run their agencies on that basis. It was a bad example, however, whether it originated in California or has an army of imitators in the East. Aside from these trivial incidents in the early underwriting history of the Coast, I have no information at my service to pursue the subject.

I assure you it is a great pleasure to recall these early scenes and experiences. Sometimes my boyhood days from 1851 to 1855 seem more like dreams than realities. I am thankful to have been spared to recite these stories now. Doubtless they seem very tame to many of you who have been through the hurley-burley of the years from 1860 to 1906. Until the fateful April 18, 1906, you labored earnestly to build up your business, and succeeded in making an unparalleled record for profit. Now you are laboring to rebuild your city and recover the enormous losses. I cannot doubt that you are aware that there is still a fear in the minds of underwriters in the East, as in Europe, that the earthquake danger is not over, and the old saying that "what has once happened may happen twice" still lingers. I have heard this remark repeated in underwriting circles one hundred times within eighteen months. The lesson for San Francisco is to relax no effort to make your city safe. I have stood up in many places and on many occasions for the bravery of San Francisco since the last disaster and insisted that the loss was caused by fire, and not directly by the great quake, but in all kindness permit me to say you cannot persuade underwriters at a distance that if the losses were caused by fire, that the fire itself was not the result of an earthquake. There is no suggestion now on the part of underwriters that they will desert the Coast. I predict that some of those who quit a year and a half ago will be knocking at your doors again in a few years, that is, if they can comply with the terms of admission. Perhaps it is true that underwriters have short memories and soon unlearn or forget some of their most valuable lessons. We have often experienced this truth in the East, and it is likely to be verified after the lapse of time in San Francisco. I am aware of the enormous loss of property and the immensity of the sum required to pay the insurance bills of 1906, but as I think of the waste and devastation caused by the six fires which blotted out so many millions between December, 1849, and June, 1851, without any insurance at all to cover the losses, and remember the wonderful energy of the merchants and citizens of those days, and the scanty population of the city, where the site of the stately City Hall of 1906 was in 1851 the site of a cemetery

where Chinese were permitted to be interred, I cannot do otherwise than repel the insinuation which I have occasionally heard that San Francisco "will never be rebuilt." I do not blame the real estate plungers on the upper Coast for offering such suggestions, but I repel and repudiate the slur upon the energy, the ability, the courage and the unanimous determination of every resident of San Francisco, a sentiment reiterated and cheered by her absent sons and daughters and all her admirers, who have made their homes elsewhere, that the city **will be** rebuilt in finer proportions than ever and fill her proud destiny as one of the grandest cities in the world. (Applause.)

Mr. Driffield: Mr. President, before continuing with the programme, I would like to make a suggestion that a copy of the proceedings of this meeting be furnished to Fire Chief Shaughnessy of the San Francisco Fire Department, as I believe that the historical statements contained in the paper by Mr. Weed will be very much appreciated by the members of the San Francisco Fire Department.

The motion was duly seconded and unanimously carried.

Mr. Dennis: I think a vote of thanks should be extended to Mr. Weed for the pains he has taken to give us this long and exceedingly delightful paper, and I so move.

Mr. Osborn: I second the motion.

The President: I am sure it will be gratifying to Mr. Weed to know that his paper has been thus appreciated. He was very much interested in its preparation, and when you consider that he is seventy-two years of age and wrote this paper almost entirely from memory, it certainly is a compliment to us that he should have thus devoted his time. I think the vote of thanks is most fitting.

The motion unanimously carried.

The President: The next paper is also by an old San Franciscan, one of the "old timers" here, but fortunately still living among us. Unfortunately, however, he is not here at the present time, and Mr. Fuller has kindly consented to read to us Mr. William Sexton's paper on "Adjusting Lumber Losses."

Mr. Fuller: It is certainly unfortunate, Mr. President, that Mr. Sexton cannot read his paper in his own happy style and impressive manner. But as he is away, just at this moment enjoying himself on the briny deep after a long siege of work, we should certainly feel that he is entitled to that consideration, and forego the pleasure of having him with us here to-day.

ADJUSTING LUMBER LOSSES.

William Sexton.

At the request of President Brown I take pleasure in offering you a paper on adjusting lumber losses, which was put together for the benefit of the Fireman's Fund Adjusters.

The method of charging the amount of the loss on the lower grade or grades of lumber that sold for less than the average cost of production, to the average cost of production of all grades to ascertain the cost of production of the higher grades, was used by me in adjusting a loss on the Albion Mill Lumber Company's loss at Albion River, California, eight or ten years ago; and fully believing that this method is fair to the insured and to the insurance company, I do not hesitate to place it before underwriters and claimants.

My confidence is reinforced by the following extract from the excellent paper on the subject, written by A. W. Thornton, and read at the 1906 meeting:

"It has been argued by many adjusters that the cost of making cull lumber is exactly the same as the cost of manufacturing the 'upper' grades, and that, therefore, the indemnity on all grades should be exactly the same, whether culls, common, flooring or clear cedar. Others contend that the grades selling for less than the cost of production should be paid for on basis of market price, and the upper grades on cost of production. There is merit in this argument if the cost of the higher grades has been properly regulated to compensate for the loss on the cheaper varieties. If, however, it is unfair or incorrect to pay the manufacturer's cost, say of \$10 per M. for culls which have burned, worth only \$5 per M., it is equally unfair to pay the cost of production on each 1,000 feet cut, say \$10 as above, for vertical flooring or clear cedar, worth \$25 to \$35 on the market.

"If a log is cut into several grades of lumber, running from \$5 to \$30 per M. feet, it is true that the expense of operating is exactly the same for each M. feet run through the mill; but the raw material entering into each grade is of different value. For instance, the part of the tree from which the vertical grain flooring is cut, is of great value, while the outside, or sap, made into lath, is practically worthless. The total cost of the completed product, including raw material, is, as a consequence, greater for the upper grades.

"The calculation of this problem is impossible by any system which has for its basis the cost of timber plus labor and expense. But there is a method which the writer has used in some

instances which seems to yield equitable results, and he presents it here for discussion and criticism."

Adjusting a lumber loss in other than a lumber manufacturer's yard is simply ascertaining the quantity of each class of lumber destroyed, and the cash cost to replace such class of lumber from the manufacturer or the wholesaler.

Adjusting a loss on stock of lumber in a sawmill yard requires the ascertainment of the cost per M. to the manufacturer to produce the various grades of lumber, the cash value per M. and the number of feet of each grade destroyed.

The cost to manufacture each grade can be ascertained from the sawmill books by taking the product of, say, ten months preceding the loss as a basis:

	Feet.
Product from saw, say.....	6,040,000
Less wastage	40,000
	<hr/>
Leaving product of salable lumber piled in yard.....	6,000,000
On which the cost of manufacturing, "use of plant stumpage, logging, hauling, towing, booming, sawing and piling," as per book items.....	\$60,000.00

Therefore, 6,000,000, costing \$60,000, gives \$10 per M. as the average cost of producing.

The books show that the above product was one-half (3,000,000 feet) "third grade," one-third (2,000,000 feet) "second grade" and one-sixth (1,000,000 feet) "first grade," and it is agreed that the plant would continue the product in same proportions and at same cost.

With these figures agreed upon, the loss might be adjusted as any other merchandise "book loss" is adjusted; but the adjustment can be made clearer to the claimant by adjusting by "count," showing the number of feet of each class destroyed and the cash value of and cost to replace such class.

Owing to the fact that lumber is produced in "grades" and that an account is kept showing the number of feet of each grade produced, and the number of feet of each grade sold with the selling price per M., and that the selling price varies from selling at a big profit one month and the next month at a loss on the lower grades, and at a small profit on the higher grades; the fact is, that as very few mills sell the lower grade at the average cost of production per M., the law of average profit is difficult to apply. The safer method of figuring a loss on the burned lumber is to ascertain the number of feet of each class burned and the cash value of and the cost to replace the same per M. in the yard at the time of the fire.

Inventory:

In this illustration we will assume that an inventory was taken at the cash selling price (value) as piled in the yard ten months before the fire, showing on hand

700,000 feet at \$10 per M. of third grade.

300,000 feet at \$15 per M. of second grade.

50,000 feet at \$45 per M. of first grade.

and that the average cost of production was \$10 per M., and of the total product one-half was "third grade," one-third "second grade" and one-sixth "first grade."

Sales:

That for first seven months after inventory 1,000,000 feet of "third grade," 1,800,000 feet of "second grade" and 750,000 feet of "first grade" was sold at the inventory prices.

That owing to the break-up of the Lumber Dealers' Association, three months before the fire, all sales in the yard of "third grade" were made since that time at \$6 per M., of "second grade" at \$13 per M., and "first grade" at \$36 per M., which is agreed to by the adjuster and the claimant as the cash values of the various grades at the time of the fire.

The unburned stock is inventoried at 700,000 feet of "third grade," 100,000 feet of "second grade" and 70,000 feet of "first grade."

All of the above figures as to quantities, grades, cost of production and cash value at time of fire having been agreed upon by the adjuster and the claimant, the statement of loss by "count" is as follows:

	3rd grade.	2nd grade.	1st grade.
Inventory	700,000 ft.	300,000 ft.	50,000 ft.
Sawed	3,000,000 "	2,000,000 "	1,000,000 "
Total	3,700,000 ft.	2,300,000 ft.	1,050,000 ft.
Sold 7 mos.	1,000,000 ft.	1,800,000 ft.	750,000 ft.
Sold 3 mos.	1,000,000 "	200,000 "	200,000 "
Total sold	2,000,000 ft.	2,000,000 ft.	950,000 ft.
In yard at time of fire.	1,700,000 ft.	300,000 ft.	100,000 ft.
Saved	700,000 "	100,000 "	70,000. "
Burned	1,000,000 ft.	200,000 ft.	30,000 ft.

ADJUSTING LUMBER LOSSES

The cost to produce the various grades can be reached by the following formula:

The cost to produce 6,000,000 is \$60,000.00, being \$10 per M, which would have been worth at time of loss, as follows:

3,000,000 ft. 3rd class	\$ 6.00 per M.....	\$18,000.00
2,000,000 " 2nd "	13.00 " ".....	26,000.00
1,000,000 " 1st "	36.00 " ".....	36,000.00

Making total cash value of.....	\$ 80,000.00
From which deduct average cost to produce 6,000,000	
is \$10 per M.....	60,000.00

Profit on producing 6,000,000 ft. 33 1-3 per cent is... \$ 20,000.00

Claimant's loss on the average cost of producing the "3rd grade," (which was worth only \$6.00 at time of loss), \$4.00 per M. on 3,000,000 feet, which is a loss of \$12,000.00.

This loss of \$12,000.00 on the "3rd grade" is added to the average cost of \$10.00 per M. of producing 2nd and 1st grade on 3,000,000 feet, \$30,000.00, making the cost of producing 3,000,000 feet of 2nd and 1st grades \$42,000.00 being \$14.00 per M.

The second grade product of 2,000,000 feet was worth and sold at the rate of \$13.00 per M. leaving a loss on producing that grade of \$1.00 per M., being \$2,000.00 to be carried to cost of producing 1,000,000 feet of 1st grade \$14.00 per M., being \$14,000.00 making the cost of producing 1,000,000 feet of 1st grade \$16,000.00 or \$16.00 per M.

Proof:

3,000,000 ft. at \$ 6.00 per M. to produce	\$18,000.00
2,000,000 " " 13.00 " " " "	26,000.00
1,000,000 " " 16.00 " " " "	16,000.00
<hr/>	
6,000,000 ft. at \$10.00 per M.....	\$60,000.00

Book statement of loss at cost to produce.

Inventory:

700,000 ft. 3rd grade \$10.00 per M. loaded \$4.00 per M.	
net \$6.00 per M.....	\$4,200.00
300,000 ft. 2nd grade \$15.00 per M. loaded \$2.00 per M.	
net \$13.00 per M.....	3,900.00
50,000 ft. 1st grade \$45.00 per M. loaded \$29.00 per M.	
net \$16.00 per M.....	800.00

Net inventory	\$8,900.00
Sawed since inventory 6,000,000 ft. at \$10.00 per M....	60,000.00
Value to be accounted for at cost to produce.....	\$68,900.00

Sales:	Per M.	Profit.
First seven months, 1,000,000 feet third grade at....	\$10	\$ 4,000
First seven months, 1,800,000 feet second grade at..	15	3,600
First seven months, 750,000 feet first grade at.....	45	21,750
Last three months, 1,000,000 feet third grade at.....	6	.....
Last three months, 200,000 feet second grade at.....	13	.....
Last three months, 200,000 feet first grade at.....	36	4,000
Saved 700,000 feet third grade at.....	6	.....
Saved 100,000 feet second grade at.....	13	.....
Saved 70,000 feet first grade at.....	36	1,400
Sales and saved.....		<u>\$94,570</u>
Less profit		<u>34,750</u>
Sales at cost to produce.....		<u>\$59,820</u>
To be accounted for at cost to produce.....		<u>\$68,900</u>
Sales at cost to produce.....		<u>59,820</u>
Loss by "Book Statement" at cost to produce.		<u>\$ 9,080</u>

PROOF BY COUNT.

Inv. and product third grade.3,700,000 feet		
Sold and saved.....2,700,000 feet		
Burned		<u>1,000,000 feet at \$6 per M. \$6,000</u>
Inv. and product second grade.2,300,000 feet		
Sold and saved.....2,100,000 feet		
Burned		<u>200,000 feet at \$13 per M. 2,600</u>
Inv. and product first grade...1,050,000 feet		
Sold and saved.....1,020,000 feet		
Burned		<u>30,000 feet at \$16 per M. 480</u>
Loss by "count" at cost to produce.....		<u>\$ 9,080</u>

The loss to the "property" at cost to the insured to replace and also at the actual cash value at the time of the loss, being agreed on, to ascertain the loss under the "policy" refer to lines "one and two" Standard Form, which reads as follows:

"This company shall not be liable beyond the actual cash value of the property at the time any loss or damage occurs, and the loss or damage shall be estimated according to such actual cash value, with proper deduction for depreciation however caused, and shall in no event exceed what it would then cost the insured to repair or replace the same with material of like kind and quality."

Under this agreement the loss at the "cash value" at the time of the fire is as follows:

1,000,000 ft. of 3rd grade at \$ 6.00 per M.....	\$6,000.00
200,000 " " 2nd " " 13.00 " "	2,600.00
30,000 " " 1st " " 36.00 " "	<u>1,080.00</u>

Loss at cash value (subject to deductions as noted below*)

\$9,680.00

The policy agreement provides that the liability of the Company "Shall in no event exceed what it would **then** cost the insured to repair or replace the same (property) with material of like kind and quality."

The adjuster will ascertain and agree with the claimant what it would then, at the time of the loss, cost the insured (not what it did cost him) to replace the destroyed lumber, on which the loss at cash value is \$9,680.00.

If the claimant cannot replace for less than the **cash** value as agreed upon, then and in that case the loss will be as stated, *\$9,680.00, less the use of the money for the time that might be required to turn the property into cash, and also the clerical work or other expense necessary in disposing of the property.

But if the Mill be not destroyed and the claimant can continue to produce lumber of the grades and at the cost per M. as agreed upon, the adjuster and the claimant must ascertain the cost to the insured to produce the various grades, as has been done in this case, and the result will be the amount of loss as above, \$9,680.00, for which amount only the Company is liable under the policy contract.

Adjusters and claimants should pay particular attention to that little word "**then**" in the contract.

The "actual **cash** value of the property at the time any loss or damage occurs" as provided for in the policy contract, is not what it **did** cost the insured, but it is the net cash market value at place of and date of loss; and, the product of Fruit Canneries, of Fish Canneries, of the farm, of Sugar Mills and such other products as depend on seasons and cannot be produced out of season, or all the year round, should be paid for at "actual cash value" regardless of cost to produce.

The product of Saw Mills, Planing Mills, Flour Mills, Sugar Refineries and factories located where there is an "all the year round" supply of raw materials, should be adjusted "at not to exceed what it would **then** cost the insured to replace."

The limit of the liability under the policy is not beyond the actual cash value of the destroyed property at the time of the loss, in the location described in the policy; and is not what the cost of replacing the same from "far away" would be.

The Company has an option to, but is not bound to replace; also has the option of paying "not to exceed what it would **then** cost the insured to replace."

All of these rights have been passed upon and upheld by the courts, and adjusters should not waive any of them.

Underwriters on products in hands of producers could save adjusters much work, much worry and the Companies much money, by agreeing to base the claim for loss on cash market value less 10 per cent. and the expenses of converting the products into coin. (Applause.)

The President: Probably no subject of adjusting on this coast has been the bone of so much contention or so much difference of opinion as the adjustment of lumber losses. This excellent paper of Mr. Sexton's, which has given us some new thoughts, and which could probably be digested by reading better than it can possibly from a hearing, should not, however, be passed by without discussion. I will ask Mr. Driffield if he has any ideas along the lines of this paper.

Mr. Driffield: I have some ideas upon the subject, Mr. President. I regret very much that it is impossible to follow any such paper as that which has just been read, but it is absolutely impossible to follow and keep the entire sense of it and at the same time follow the calculations. Without knowing that this topic was to be the subject of a paper, I have, at Mr. Sexton's request, examined the formulas which he has presented, and when I heard that a paper would be read upon it at the meeting, I drew up this following short expression of my own views which are in accordance with those of the author.

In conclusion, I will say that I do not think Mr. Sexton intended the proportionate part of the case to be taken as a guide by any adjuster for the future, that is, that an ordinary cut would consist of one-half third grade, one-third second grade, and one-sixth first grade. That is of course a matter to be arrived at by conferring with the millman and coming to a conclusion between him and yourself.

The President: Perhaps Mr. Thornton can give us some ideas upon the question, as it is one with which he is familiar.

Mr. President: I have not the wonderful memory of Mr. Weed, of New York, whose paper was read this morning, so cannot recall in detail the statements contained in Mr. Sexton's able article; nor have I had an opportunity to prepare for a dis-

cussion of it. I trust, however, that with this treatise of the subject by Mr. Sexton, together with Mr. Driffield's commentaries on it, every special agent and every adjuster on the Coast will be enabled to easily figure out the cost of manufacturing lumber and determine the proper indemnity to be paid the assured in case of loss on lumber.

I wish, however, to show that there are a few cobblestones in the smooth and easy way outlined by these two gentlemen. First, they assume that there are but three grades of lumber and that the loss incurred in producing two of the grades should be added to the cost of the other. This theory may operate satisfactorily if correctly computed. It is but theory to presume that there are but three grades of lumber or that the daily or monthly cut or the daily or monthly sales will be uniform as to these grades.

You will find in adjusting lumber losses that there are two or three grades of lumber initially,—cedar, fir, redwood, etc., varying in prices. Then there is flooring, first, second and third grades, siding, ceiling and shiplap, each with one, two and three grades; dimension lumber varying in price according to size; common lumber with different grades and different prices according to length. Like Heinze's pickles, there are about fifty-two different varieties and different prices, and to compensate the loss on the "lowers" to the decreased cost of the "uppers" is almost an impossible task, even if the by-products, such as shingles, lath and fire-wood are eliminated. And to carry these multiple grades from the original inventory through a year's cut and a year's sales is almost out of the question.

I believe the easiest and best way is to follow the plan we adopt in merchandise losses. When we adjust a clothing loss we do not ask how many E. & W. Collars were in the last inventory, adding the purchases and deducting the sales on this one class, because the profits may be small, treating other portions of the stock in like manner because the profits vary. We ascertain the average profit and compute the loss on such ascer-

tained average profit. And on the presumption that poorer material enters into lower grades of lumber, I believe in deducting an average profit from the selling price of each grade to determine the cost to the assured.

Mr. Sexton and Mr. Driffield have referred to the word "then" in the policy, stating that if the mill is not destroyed by fire the measure of indemnity should be the cost of manufacturing, but if the mill is burned then the market price should be paid.

I do not know the exact time to which the word "then" refers in the language "What it would **then** cost the assured to replace or repair." The judges of the United States Supreme Court were not unanimous in their decision on the wording that suit must be commenced within twelve months after the fire; some of the judges holding that it meant twelve months after proofs of loss. What may we expect, therefore, as the legal definition of the word "then"?

If the mill burns a few hours after the lumber is destroyed, how shall the word "then" be applied? If it burns by independent and separate fire before the adjuster arrives on the scene shall we adjust on manufacturers' cost or market price? If, after agreeing with the assured on the lumber loss, based on manufacturers' cost, the mill burns before proofs are signed, shall we start a new adjustment under the new conditions and pay market price? If not, why? Is not the assured as much injured as though the one fire destroyed both lumber and mill?

Again, if the assured loses his mill under foreclosure of mortgage at practically the same time as the lumber is burned shall we pay market price? If he sold the mill the day before the burning of the lumber, is the same rule to apply? He is as much unable to reproduce the lumber as though the mill had burned with the lumber.

Another question,—The St. Paul & Tacoma Lumber Co. at Tacoma has two mills, known as "A" and "B," the product of both being piled in one yard. If the lumber and one mill is

destroyed, leaving one mill standing, is the basis of indemnity to be manufacturers' cost or market price, or a compromise between the two?

Gentlemen, if we are drifting into the position of paying market price for lumber or market price less ten per cent (which no more than covers reasonable depreciation) we are making a mistake and creating a moral hazard. In every case of loss we seek only to indemnify,—to ascertain just how many twenty-dollar gold pieces have actually been put by the assured into the burned article and then stack up for him an equal number of twenties so far as the policy will permit.

I believe the word "then" was intended to mean "what it was then costing the assured"—or the cost then (at the time of the fire) to manufacture. The simplest way is to agree on such a percentage of market price as will allow for profit and reduce the indemnity to cost of production, or as near to it as we can approach by simple methods. If we find the average profit thirty-three and one-third per cent. on lumber, let us provide in the policy form that the assured shall recover only seventy-five per cent. of the market price of any lumber destroyed. This will afford ample indemnity and is what the policy aims to accomplish. (Applause.)

The President: That concludes the program for the day, gentlemen, and, unless I hear some objection, or there is some further business to transact, the meeting will stand adjourned until tomorrow morning at 10 o'clock. The first paper then to be considered will be entitled "Special Agents and Their Relation to the Management," by Mr. J. B. Walden.



SECOND DAY.

Wednesday, January 15, 1908.

The meeting was called to order by President Brown, at 10 o'clock a. m.

The President: The first matter for consideration this morning, gentlemen, is a matter laid over from yesterday morning, that of reading the names of those who are delinquent for dues. Is there any further expression of opinion in that matter?

Mr. Gunn: Mr. President, I do not want to be deemed a kicker, but I do not like, on general principles, to have the names of delinquents read. There are a good many gentlemen here this morning who were not here yesterday, and I may say that there was a resolution at that time that those who were delinquent in their dues should be debarred from attending the dinner tonight. I ask for a postponement at this time in order to give the boys a chance to straighten the matter out inside of twelve hours. For the benefit of the men who were not here yesterday, I request postponement of the reading of the names of delinquents until this afternoon. In this connection, I desire to say that it has been my idea for some time that the matter of dues should be collected from the offices and not from the individual members. Nearly all of our membership is made up of managers and special agents, and the proper way of getting the dues is to collect from the offices. Our office pays my dues, I know, and I think that is the rule with a great many. So I would like to suggest that the Secretary be instructed to collect from the offices. I don't know how he is going to do it, but that would be the easier way, and it would be better both for the Secretary and for the members.

The Secretary: In the matter of delinquent dues, it is not so much the delinquency I am now after. I want to know

where the members are, or whether they are now members. I have been trying for the last two years to get the membership in shape. All our records were burned, and in reading these names out there are men here who can tell me whether the persons named are in the field, whether they are local agents, or give other information about them, and so help out the records. So far as their being debarred from the banquet is concerned, that can be passed if it is desired. I have something like twenty or thirty names that I would like to get this information upon, and then I will have a complete record.

Mr. Thornton: Mr. President, might it not be a good idea to read this list now, without having it go into the proceedings, so that the members present may enable Mr. Meade to straighten the matter out before it finally does go into the proceedings? It cannot do any harm if that is followed. Possibly there are some there that are on the list by mistake.

The President: Does Mr. Thornton offer that as an amendment?

Mr. Gunn: I did not intend to make a motion in the matter. There may be some special agent here for instance, who thinks his office has always paid his dues. If Mr. Meade wants to read the list and the members desire it, I have no objection, certainly. And perhaps, in view of the Secretary's suggestion that it will enable him to locate them, it would be better to proceed with it now.

Mr. Thornton: I move that the list be read, not to go into the proceedings, but to get a record at the present time.

The President: It is moved that the names be read at the present time. If there is no objection, the Secretary will read the names—not as delinquents, but as those whom he has up to the present time been unable to find, and if you gentlemen know anything about any of them, as their names are called, will you kindly give us the information.

The Secretary: In former years I was instructed to notify all delinquents, giving them thirty days within which to reply.

The President: I believe that is a constitutional provision. What are your wishes in the matter? It would seem to be a good rule to enforce, because the Secretary cannot be expected to devote an unusual amount of time to this matter, members should pay their dues, either through the offices or direct, and if we are to keep the membership of the Association up to the standard in all respects, some action of this kind is apparently necessary. I would like to hear some expression upon the matter.

Mr. Kellam: I move that the Secretary be instructed to put the constitutional provision mentioned in force.

The motion was seconded and unanimously carried.

The President: Yesterday the Association passed a motion that a committee be appointed to confer with the life, accident and marine associations here relative to amalgamation as far as the library and probably the Institute are concerned. The Chair now appoints as such committee the Executive Committee to be appointed at this meeting.

Mr. Spencer, of the Dinner Committee, asks me to say that if there are any members who have not as yet signified their intention of going to the banquet, and who intend doing so, they shall send him word by 12 o'clock today, as the arrangement of seats is a matter that involves considerable time.

Mr. Moore has very kindly interviewed the operator of the wireless telegraph system in this building, with the idea that perhaps some of the members might be interested in learning of the workings of that to us almost unknown method of telegraphy, and advises that the operator will be glad to show any of the members the workings of the wireless system if they will come to him with Mr. Moore.

We will now listen to the first paper on this morning's program, entitled "Special Agents and Their Relation to the Management," by Mr. J. B. Walden.

SPECIAL AGENTS AND THEIR RELATION TO THE MANAGEMENT.

Jerome B. Walden.

While insisting that I contribute a paper for this meeting, President Brown, in his most confiding and winsome manner, left the subject to my own choosing, suggesting that I treat on some "hobby" of mine, but I have not yet satisfied myself that this was either wise or kindly on his part.

This Association has been favored on similar occasions in the past, with some very creditable papers on the subject of the Special Agent, and it seems to me almost impossible to sufficiently vary the discussion, and yet maintain a treatment of this subject in such a general way as would prove both instructive and entertaining.

Again, the relation between Manager, Special and Local Agent is so close that I must of necessity bring this latter very important functionary within the purview of this discussion for the proper presentation of the co-relations of all or either toward the other.

In deciding on this subject please do not consider that "Special Agent" is any hobby of mine, or that the two terms "hobby" and "special agent" are to be considered synonymous. I wish to emphasize this point with you at this time, particularly, since a designing friend has called my attention to the fact that one of Webster's definitions of the word "hobby" is a "stupid fellow."

Since the above mentioned discovery, I also find that Webster defines the word "special"—as "particular," or "peculiar."

Now, while I dare say we all of us would resent the intimation that we were in any way "peculiar," we none of us would object to having the reputation of being "particular" in our work; and this brings me to the point I want to make in this paper, i. e., "fidelity to detail"—as the one thing most to be desired in the successful Special Agent. This is true both from our own, as well as the managerial standpoint, for I maintain that in no other business are the interests of both principal and lieutenant more identical.

As small particles are the component parts of every greater body, so are small details necessary to every large and important result; they are the act by act, and day by day growth of all successful lives.

By virtue of the great responsibilities placed upon the Spe-

cial Agent, which are incidental to the peculiar and varying conditions of the business, the relations between Manager and Special should be marked by confidence and just appreciation on the part of the former, and by strict loyalty, high ideals and earnest endeavor on the part of the latter.

Confidence is the rock upon which all business interests are founded. It backs our credit and makes not only our profits, but our very business existence possible. The confidence between Manager and Special Agent must be mutual. The former should have confidence in the character and habits, as well as the business ability and integrity of the latter. It is equally necessary that the Special Agent should have confidence in the business sincerity of his principal, when dealing with his agents and the public. Given these co-existing relations, you will have success spelled with big letters.

With the Manager, work becomes second nature. He has won his spurs, but must keep digging away to hold them. His guiding hand must manage the ship by directing those forces under him, rather than by personally attending to the "splicing of the ropes" and the "weighing of the anchor." On his ability and knowledge of the necessary details required in the performance of the work in hand will largely depend his success in weathering the storms and reaching the harbor of profit.

But we must follow the thought further. The more intelligent and active his officers and crew in anticipating the needs of the ship and performing the details promptly, the less time consumed in reaching that harbor and correspondingly greater the profit.

When the Special Agent returns to the office after a long trip, with the memory of all that he has gone through in aggressive effort and personal discomfort, but having the consciousness of having been specially successful, he must not be disappointed if the "office grind" has taken the poetry out of both Manager and office force, and that he does not always get the anticipated expression of appreciation. At such a time, perhaps he can extract some satisfaction from the first half of Longfellow's meaty verse:

"No endeavor is in vain,
Its reward is in the doing."

If philosophically inclined, the remainder of that verse will appeal to him:

"And the rapture of pursuing
Is the prize the vanquished gain."

And yet perhaps, if the Manager could but realize it, this want of encouragement may make the Special lack something which is the mother of success—"confidence."

The exigencies constantly confronting the Special Agent in the prosecution of his multifarious duties call for a high order of ability, and these requirements can only be met successfully by constant application and study. The importance of preparedness becomes easily apparent when we consider the responsibilities placed upon him. At times he legally is the Company, and on his acts the Company must stand in matters wherein it can subsequently have no legal redress, and he must endeavor to do the right thing at the right time always.

Like his Manager, increased premium income and low loss ratio are his greatest ambition, although unlike his Manager, he is not supposed to carry those troubles into his dreams at night.

Quoting from Meaders' "Reflections of the Morning After," "A man's methods may be studied, his resources considered and his efforts admired, but the final verdict of posterity is based only on the results he accomplished." This is particularly true in our business.

By "doing things" to-day—cleaning them up—we accomplish something; something which if carried over until tomorrow must then take the place of something else undone, which in turn too, must be postponed.

The busy man has, perhaps a dozen such items every day. Think what the daily accomplishment of these items would mean to him in a year's time could the items which otherwise might accumulate, be disposed of regularly.

We should not fail to welcome every means of increasing our capacity, for without this capacity we would make but an indifferent success in any event, and more especially so were signal advancement given us.

The word "luck" so frequently used, in a general sense represents a condition; and being qualified as both good and ill, is fathered largely by environment. Many of us may be better fitted for other work than that which necessity selects for us, but if such is the case, our environment seems to offer no opportunity for choosing, and even could we choose, our superficial knowledge of other branches of industry would probably preclude a wise choice.

When we consider that a father after mature years cannot always decide what is the best life occupation for a son—how can that son who has just reached manhood, decide rightly for himself the business for which he is best suited.

While we may make either a wise or an unfortunate choice for our life's work, earnest endeavor will enhance the former and just as surely mitigate the latter.

By perseverance we gain always; this is the universal rule and none of us can hope to succeed without it.

High ideals beget effort; effort brings results, and results count.

Longfellow says: "Our to-days and yesterdays are the blocks with which we build." Therefore the more work yesterday and today, the better the blocks and the stronger the structure.

Having a fine conception of the needs and requirements of your management, always bear in mind that something done is infinitely better than **any** excuse that could be offered for its non-performance, however valid that excuse may be.

As our ranks are being added to from time to time by valued acquisitions from the office forces of the various companies, a word to these younger Specials may not seem out of place here.

The correspondence from the Special to his Manager should be brief, to the point and not burdened with his own excuses or disappointments.

In his inspections and other reports he should endeavor to cover all important points involved of value to the Management. In other words, he should recollect that he, being on the ground, is in a position to know the exact conditions and should present the material facts as he sees them, thus avoiding the necessity of any guess work on the part of the Management; otherwise he might subject himself to the charge of carelessness, which no Special Agent can afford to do.

Time is a valuable asset to every one of us, and while none should be wasted, sufficient time should be consumed always to successfully perform the work in hand, care being taken to personally work out as much of the detail as can safely be done, without troubling your principal.

The Special Agent cannot afford to act hastily or without due consideration in important matters; in fact, quite the reverse should obtain.

While speed in small things is greatly to be desired, we should not acquire this accomplishment at the expense of accuracy. It is not only an undesirable habit for us, but its example before the local agent is very demoralizing, and there can be no justification for it.

A Manager may forgive an error, but he will have little use for the Special who can give no reason for his acts.

Shaw says, "Success does not consist in never making blunders, but in never making the same one a second time." This is a simple statement of fact and the lesson is obvious.

Quoting from Ruskin, "What must of necessity be done, you can always find out how to do." Having once decided upon a course of action, it should be approached in no uncertain manner. Have the courage of your convictions.

We owe it to ourselves as well as to the local agent and the Company, to see that our representatives are generally well informed and have had the proper instructions. To this end we should seek opportunities for discussing any and all matters pertaining to the business, with them. This will serve to refresh ourselves as to rules, rates and regulations and that we may ourselves occasionally learn something of value is not improbable.

From the fact that the average local agent, by reason of the limited insurance business in his district, is forced to make of Fire Insurance a side issue, he is usually prone to give the **detail** of that business as little time and attention as possible in so far as regards his relations with his Companies, thereby causing much unnecessary correspondence, irritation and delay in securing the required data for the proper office consideration of the business offered. There are occasions, too, when serious financial loss to the Company may be sustained through the failure of an agent to furnish necessary information.

APPOINTING LOCAL AGENTS.

The practice of leaving your agency supplies with an indifferent agent simply to get an appointment of record with your Manager will not be indulged in by the successful Special Agent. If the right opportunity does not present itself, better keep out of that town altogether than to temporarily mislead your Manager.

I have in mind one such agency where the supplies of six different companies were on hand and remained unopened for a period of more than one year, while the agent actively represented three other companies.

Some of our locals after years of agency representation have surprised us all by showing how little conception they have of the first principles of Fire Insurance. This condition is, perhaps, largely the result of our entering an agency where other companies are already represented, and the assumption on our

part that the agent must have been previously instructed; however, there is no excuse for assuming such to be the case, when every Special can and should satisfy himself on this point by asking such pertinent questions as are necessary at the time of the appointment and before he leaves the agent to shift for himself.

The success or non-success of an agency fostered under such unsatisfactory conditions is simply a matter of chance, with all the chances against a possible profit for the Company.

"If there is a virtue in the world at which we should aim it is cheerfulness." Bulwer Lytton.

There is much truth in this proverb from the Insurance man's standpoint as well as in the various other walks of life. One cheerful clerk in an office can sometimes wholly change its atmosphere, while cheerfulness is the Special Agent's best friend; his stock in trade.

Don't be too suspicious, and don't knock the other fellow. The other fellow's action may be the result of his point of view—and then he may be right. Some of the managerial friendships of years have been strained in the past, by the ill-advised airing of a Special Agent's unfounded suspicion, advanced perhaps, as an excuse to his Manager for his own lack of results. Remember that at times the interest of both the local agent or the public is sought to be furthered by inducing us to believe that some other company has broken its obligation. To voice such insinuations where not well supported by evidence is to wrong the fraternity. If in doubt, care should be taken to at least consider well the facts in the case before making charges.

If incorrect practices are indulged in, in certain quarters they must eventually come to the surface; rest assured of that. Short cuts to success can only be temporary, and are never justified.

In closing, I will quote a gem from a well known authoress, "Life is too short for aught but high endeavor."

Let us apply this sentiment with satisfaction and profit to correct practices in our business relations. (Applause.)

The President: Old subjects well treated are always new. After listening to Mr. Walden's paper, we feel satisfied that in making excuses for taking up an old subject, he has made a mistake. Every man who has been on the road for any length of time has his own ideas as to special agents and their relation to the manager, and in the discussion of this paper and with

that idea in view, I should like to hear from Mr. Sewell. (Applause.)

Mr. Sewell: Mr. President, I see that my appreciation of Mr. Walden's paper is the view of all present. I can only repeat what Mr. Brown has said, that this is a most excellent paper, the best I have ever heard on the subject of "Special Agents," and we have had a good many good ones, and I speak with no want of respect to the others. I think we can all, after the annual proceedings are printed, turn to our volume and read the article about once a month, and get more from it each time. It is a most excellent paper, and well read. (Applause.)

The President: Mr. Staniford, you have ideas of your own as to special agents and the management. Let us have some of them.

Mr. Staniford: I am not quite decided, Mr. President, whether that is a compliment, or not.

I have listened with much interest to what Mr. Walden has said. If we could live up to his suggestions, and each of us become the special agent that that paper outlines, which is possible by adopting the suggestions offered in the paper, I think almost any manager would be sitting up and taking notice and be looking after that kind of special agent. As he read the paper, I was reminded of a friend of mine who is somewhat differently built from what I am—he is one of those long, tall, thin, severe fellows, that takes a strong pull to make him smile. Yet I have traveled with that fellow over the field quite a bit, and his methods with the manager, with the local agent, and his method of cultivation, are all as different from mine as it is possible for one man's methods to be different from another's. Yet he is one of the most successful special agents there is on the road today. Why? Because he has an individuality that no other fellow has. He approaches the local agent, and there is only the one—it is just that one man. If I could take some of Mr. Walden's ideas and inject them into this special agent's personality and into his mentality, he would not be the same

man that he is. Mr. Walden's man is a cosmopolitan special agent. He is the product of the environment that the special agent meets. I will offer the suggestion that, you look around among this body of special agents, I don't see many managers here, though there may be some—by the way, it occurs to me that the managers are getting less and less and less in attendance at these meetings as the years go by, and it seems to be a special agents' meeting. But what I refer to is that the nature of our work should tend to the making of the special agent that Mr. Walden refers to, and you will find the characteristics, as I know them, in nearly every special agent that you meet. I have enjoyed the paper very much, and I shall hope when it is printed to go over it and read it again with a great deal of pleasure. (Applause.)

The President: They say that an altitude of 5,000 feet above sea level sharpens men's wits and brains more than the sea coast. All of us have enjoyed reading the editorials each month in the "Insurance Report," of Denver. Mr. Drew, the editor of that paper, has kindly consented to read a paper for us at this meeting, and I will now ask him to address you. It is entitled "Impressions of a Traveler from Altruria." Mr. Drew, gentlemen. (Applause.)

Mr. Drew: Mr. President and Gentlemen: I take the liberty of reading to you a paper that was prepared by Mr. C. Homos Hobocas and read by him before the Historical Association of Altruria. He paid a visit to our shores and made a sidewalk survey of the construction of the fire insurance ^{edifice} ~~editors~~, and he found enough to, I think, convince you that he is entitled to be considered a good special agent. I will present his paper as he read it.

IMPRESSIONS OF A TRAVELER FROM ALTRURIA.

Cyrus K. Drew.

Being some observations on certain American fire underwriting conditions, presented before the Altrurian Historical Association by Mr. C. Homos Hobocas, Globe Trotter.

(Offered to the Fire Underwriters' Association of the Pa-

cific, San Francisco, January 15, 1908, by Cyrus K. Drew, editor of Insurance Report, Denver.)

Before entering upon my cursory review of American fire underwriting conditions, it is proper that I should acquaint you with the enjoyment the task brought to me, in order that you do not mistake my enthusiasm for a show of learning respecting an avocation whose intricate problems are not yet, I found, fully learned even by those engaged in it.

Quite naturally our inquisitiveness directs itself first to the government of insurance. It must be remembered that fire insurance, like all other commercial enterprises in America, is a private venture, undertaken solely by voluntary corporations for self-gain.

In far-reaching usefulness, in the demands of necessity, no industry in America wields the force which attaches to fire insurance. It is the bulwark of commerce, the foundation rock which alone sustains the great underlying principle of all business intercourse in that country—the trade credit system. It is the only medium offered to people whereby they may secure indemnity against loss by fire, a disaster of such uncontrollable destructiveness in America that it annually wipes out of existence property values far greater than the total of such losses for all the rest of the world combined.

So essentially vital a function then, as this is in commercial life, logically should merit and enjoy all possible governmental protection and encouragement. Yet the very opposite I found to be true. In that amazing country of stupendous corporate enterprises, insurance is the only form of legitimate human endeavor about which the national government does not concern itself. Outlawry and fire insurance would appear to be regarded as twin evils, notwithstanding that fire insurance is the warp and woof of the entire commercial fabric. Not only does it suffer the stigma of being looked upon suspiciously as something apart from the weave of honest business life, but the further blight rests upon it, through a ruling of the highest court of the land of its denial to the right and the dignity of being legally regarded as commerce.

Yet, despite this, the business of fire insurance suffers the paradox of being the most widely and variously governed industry in America. Its separation from the guiding protection of the National Government places it at the mercy of the various States. In each of these jurisdictions the local government assumes unbridled direction of insurance, concerning itself with

every detail, just stopping short of actual governmental control. Forty-seven varieties of official interference is the unhappy result. Forty-seven States vie with each other in striving to burden the practice of insurance with every conceivable form of restraint, each State following its own untutored, and oft times unprincipled inclinings, wholly apart from what any of the other States or all of them may do.

The greatest hardship attaches to the operation of the taxing power of States. In this there is no uniformity of plan beyond the quite apparent one that the States need the money and that insurance shall be soaked good and hard to produce it. Twenty-four million dollars annually is the tribute paid by this industry to this abortive system of government. One of the States assesses companies one million dollars yearly, spending only fifty thousand of it in expense for supervision. This is of a pattern with what exists in all States, the remainder of the fund so collected being passed to the general treasury for politicians to juggle with.

Were this form of rigorous taxation to end with the performance of the State's functions, insurance might cheer up a bit. But to every hamlet, town and city, the extortion infection spreads, until insurance is called upon to pay toll everywhere through a great variety of hold-up schemes.

Thus is seen the injustice of an Americanism which permits the States to levy variable and crushing taxes—piled on top of what already is a tax—against an industry which operates to equitably distribute the whole burden of fire insurance cost among the people of those States. It seems almost incredible that in some States—nineteen in all—this fundamental corporate right to intelligently measure and apportion the equitable share of insurance tax upon the people is not only denied these companies, but the requisite performance whereby the just charge might be scientifically sought is, if entered into, made punishable by heavy fines and by expulsion from the State.

INSURANCE COMMISSIONER.

The man on the job in each State is the Insurance Commissioner. The more capable ones usually regard themselves as specially ordained guardians to the industry, and set about the task right merrily of reform and purification—a political fad much practiced in America. Others advertise their constant need of a guardian to their own acts, so incompetent are they, and I fear, at times, in some instances, so oblique is their attitude toward probity.

The Commissioner is chosen by the Governor, it would appear, but this is a delicious fiction, I am told, the job invariably being bartered for in advance by the political bosses with no regard for the fitness of the selection. One Commissioner, who has grown quite proficient, secured the appointment only because the better jobs gave out before the bosses got around to reward him for political work. The laws demand that the Commissioner shall be versed in insurance, but it is most difficult to find one fully acquainted with every branch of insurance—the only two classes of humans possessing that all-embracing knowledge—so a competent authority informs me, being deposed company officials and some insurance journalists.

It is a hopeful sign that these Commissioners eventually may be chosen direct by the people in all States as they now are in a few. It is also reassuring that there is a tendency among States to adopt uniform methods and laws of greater justice to insurance. This spirit has so far but slightly shown itself, but it points the way to a centralized form of equitable regulation, even unto the crowning achievement, so desirable for all interests except those of the individual States, of the parent government direction of insurance. That this altruistic condition still is a long way off is shown by the recent laughable faux pas wherein certain Commissioners demanded that companies report their financial condition, as heretofore, on the value of investments at the close of the current year, while other Commissioners, seeking to soften the effect of a marked depreciation in securities during 1907, granted the same companies the right to report the same investments valued as of December 31, 1906.

You see, then, that the policy of justice and equal rights—the "Square Deal"—does not exercise itself in the relations between the States and insurance. One fire underwriter—a man of great erudition, the type of not a few others thus distinguished, I was told, in the country at large—likened fire insurance to the American game of chance called poker (well known of insurance men), wherein the States have stacked the cards against the companies, which, though graciously permitted to deal when their turn comes, are looked upon with suspicion in the exercise of that inalienable right of the game.

Now, when we reflect that these fire insurance corporations struggle in fierce competition one against the other for the privilege of such an existence as I have indicated, and that they are made up of individual investors who demand profit from the venture, it is small wonder that I received inconclusive replies to my query, "What's the use?"

Fire insurance could not exist in America, as conducted through stock corporations, were it not that these corporations develop superior talents in banking and a fine art in the acquisition of book profits through the manipulation of investments and by speculation. The trained underwriter at the head office has become subordinate, I am told, to the skilled financier, because dividends, which the stockholders expect and receive, cannot be paid out of the insignificant profits on underwriting. The community-of-interests spirit breaks down at the point where the stockholder fails to get returns on his investment. He knows nothing of insurance and less, perhaps, of banking, and all his odd time is spent nourishing the hope that the practical, technical men whom he and his associates hired to run the corporation really know as much about the game as they pretended to know when they got their jobs.

Companies, then, become known by the managers they keep guessing, as indicated by the success or the failure of that effort and by the manner of its performance. There is personality in the contest and much of individuality, a distinctive character given to each company, a differing in quality and in reputation. Yet it was only within the past year that any hint of this distinguishing difference was caught by the people in an effort on their part to analyze and classify the character of indemnity offered for sale by these widely differing corporations.

PHYSICAL HAZARD.

It is the flimsy construction of American buildings which makes so important a subject of physical hazards—the real source of that country's appalling fire waste. There are twelve million buildings in America, only five thousand of them being of fireproof construction, while of these four thousand are filled with inflammable material. The upper sections of the greater number of American buildings and often much more of them, besides, are merely transplanted lumber yards. With the destruction of the forests brought about by the insatiate greed of the American people for lumber as a building material, it takes no prophet to foretell the time when concrete will be used universally. In that day the fire underwriter will come into his own.

As early as 1781 the first American company ran afoul of the problem of physical hazards, by ruling that it could no longer insure houses where trees were planted in front of them, because the trees made it difficult to fight fires. Hence it is seen

why ever since so many things in the profession have been up a tree.

I find, however, from a careful perusal of the classic annals of the business that, after all, there have been but two really great and troublesome hazards to harass underwriters—the cow and the earthquake.

At Chicago a lady kept a history-making cow possessed of nocturnal habits of great stubbornness respecting her output of milk. No blame attaches to the lady, for history records that it was the cow that kicked over the lamp which set the stable afire and burned down two-thirds of the town.

Here was an unchartered hazard suddenly burst upon underwriters. It is no surprise that many companies failed. Others more courageous and defiant sought to evade liability by pleading that their contracts did not cover so unforeseen an element of disaster. Another group—with the money or the means to get it—quickly paid all claims in full with great parade of magnanimity, bulwarked by the reservation that later on they certainly would look carefully into the fire's origin.

Thus the cow hazard became a vital problem.

American underwriters are thorough, so they went deep into the case. Was it not possible that somewhere in the evolution of the milch cow, its antecedents might, by a mysterious process of nature-faking, have become crossed in their breeding with the lightning bug, or the mule, or both?

It required but little scientific research to establish the fact that there certainly existed a marked difference in the character of milch cows. This granted, it was proper to debate whether or not the insurance contract should contain a clause setting forth what manner of cow was kept on the premises, and stipulating when, how and under what conditions said cow was kept. Hence, the contention logically grew that a policy covering blindly all the hazards accompanying the milch cow should command a higher price than one specifically exempting such hazards.

A year of intense controversy followed. In the end the proposition was sustained that the mere presence of a clause in the contract was totally inadequate to control a serious hazard, which all agreed to be an ever-present source of danger to the profitable pursuit of underwriting. It only remained, then, to determine, by the simple process of mathematics, what charge should be made for this additional liability. I was assured that the selection of a rate of exact nicety was happily arrived at, and that since that time rates have amply taken care of the cow

hazard. It is not for me to complain because I was not permitted to enjoy having it unfolded to me just what portion of the premium charged applies to this specific danger.

At San Francisco, thirty-four years later, the earthquake came to dispute pre-eminence with the cow. It was quite as clear as at Chicago what caused the fire. The loss was infinitely greater, establishing the world's record in conflagrations. The appalling extent of its destructiveness is indicated by the values destroyed, which approximated three hundred and fifty million dollars, the structures burned numbering twenty-eight thousand.

There were not so many company failures as at Chicago, though the record is identical with respect to some that resisted payment for the same reason urged by the laggards at Chicago, and of a much larger number of others that paid promptly in full, with equal parade of magnanimity. I need hardly say that the honorable discharge in cash within a few months of a liability totalling one hundred and eighty million dollars performed at San Francisco by these wonderful fire insurance corporations forms not only the most brilliant page in the history of that marvelous industry, but is, besides, one of the world's greatest recorded achievements in finance.

When the experts came to analyze the earthquake they found it not unlike the Irishman's flea, the original of which abounds in San Francisco. It was one thing to concede that each property owner has concealed about his premises at all times the elements which go to make up a first-class earthquake, capable of troublesome antics, but it was quite another and more difficult thing to determine under what conditions, and when, and how, he should be called upon to regulate its behavior.

The cow hazard thus sank into the oblivion of a simple kindergarten proposition by contrast. Science had faithfully recorded that at the exact point where the single kick of that individual cow ended, the fire began. There was no such simple designation possible in determining the particular point where the multitude of fires got a show after the business end of the earthquake let go.

Now, surely, if any need for a cow clause, why not for a universal earthquake clause? The controversy was waged with much feeling, which crystallized into a conviction that precedent indeed offered an admirable guide in the distinguished case of the cow. I am glad to be able to record that a gloomy year was brightened when the unanimous conclusion was reached that not

only a kicking cow but a bucking earthquake might reasonably happen at any old time in the best regulated households, and that therefore the premium charge should be honest enough to admit the fact by amply covering these dangers which no mere clause could properly take care of.

The inspired experts know full well how these two grave hazards have been provided for in the rates of premiums, but they are not telling anybody. The observer enthuses with a glow of admiration when contemplating the thoroughness of the job at San Francisco, for not only has the cow been satisfactorily taken care of in the premium charge, and the earthquake, too, but many, many other things unguessed and unseen besides.

This slight glimpse into two vital incidents of American underwriting history leads logically to a further glance at the science of rate making. In seeking to arrive at a fair price for all fire insurance indemnity, the rate sharps have evolved some curious tables of figures known as "schedules." These schedules are wonderfully and fearfully made, being based upon the idiosyncracies of each and every structure as determined by its construction, its occupancy, its environment, its intimate associations in, around, above, about, and beneath it, encompassing the whole range of endangering or helpful exposures from within and without, excepting that of the "indecent exposure," with which fire insurance has nothing to do, only in so far as it affects the moral hazard. Books have been written about these schedules which were eminently satisfactory to the authors. Schedules, I was informed, oftentimes have a fickle way of differing with each other and with themselves. They are designed to smear the insurance tax somewhat artistically and with a show of equality over the various types of hazard, the object being to bolster up a fading belief that companies can secure income enough from premiums to pay losses, expenses and dividends. One of their chief uses, I was assured, adds verisimilitude to an otherwise bald and uninteresting narrative by illuminating why it is that a dwelling house at Titi, Georgia, can be insured for a lower premium than is charged for a similar risk at Walla Walla, Wash.

By their quaint eccentricities these schedules have evolved what underwriters call the "Sink of Iniquity" in their business—preferred classes of risks. They are preferred because of their assumed superiority as profit producers. Companies scramble over each other with great intensity of feeling for more of this class of business than the other fellow is getting. I could not

quite understand this, but I was assured that companies preferred preferred business because they prefer to encourage the belief among themselves that such risks are rated so as to create a hungry demand for them in competition. It is quite interesting to study this phase of the equity in schedule rating and to note with what clearness it is unfolded, how these schedules accurately establish the exact balance between the hazard and the cost of assuming the liability. I found that it was not proper to presume that this equality in rating ought to produce a condition where no risk could be preferred above another on the theory that each should pay only its own precise and just share of the fire insurance tax.

This preference for the sink of iniquity character of risks is so general in America that companies pay an additional stipend to their local agents as a bribe to induce it. Again, I was assured that the principle of equity is not violated by the excess loading which these rates carry to provide for this additional cost.

CLASSIFICATION.

The process by which companies arrive at the discovery that some classes of risks are less profitable than other classes is called "Classification." Its effective simplicity is shown by the illustration that when a livery stable burns and destroys an adjoining furniture store, the loss on the furniture store is charged against the total premium receipts for all furniture stores insured by the company.

If national control of fire insurance is ever to be a reality in America—that is, if the Government itself is to enter the insurance business—it will be brought about as the result of this theory and practice of classifications applied to the combined experience of all companies. The disclosure of the exact cost of protecting each and every risk against loss or damage by fire would quickly eliminate the egotistic, competitive form of commercial endeavor, by reducing to a mere governmental function the proper distribution of the fire insurance tax.

I was amazed to find in a country where publicity is a mania that the intimate affairs of fire insurance are shrouded in deepest mystery. The members of underwriting associations, charged with rate making and general supervision, glide silently into their assembly rooms and there debate in sequestered secrecy upon the vital things of the business. They wear gum shoes, blinders, gags and mittens.

It is not strange, therefore, that the great American news-

papers know as little about fire insurance as they do of Altruria. Their representatives couldn't break into these star chamber sessions with a jimmy. Still, I actually found men in the business who grieve because insurance is so grossly misrepresented in the public prints.

As a buffer between the secret intelligence of a business hedged about by intricate technical problems, and the ignorant public, there stands the Darwinian missing link—the insurance journalist. His first duty is to the profession rather than to the public. The greatest service rendered by the trade press in the uplift of the business has been to stem the tide of public distrust and suspicion. Trade journalists are sentinels directing the people to a sane and intelligent comprehension of one of the most confusing and expert businesses of the world, yet even these earnest workers in support of the profession are forced to discuss its problems with but half-concealed ignorance, for they, too, are seldom, if ever, admitted to the inner councils of the learned ones.

The impression grows upon the observer that the secular press is rather encouraged to nourish the belief that fire insurance is little short of outlawry. The result is that nothing a man buys in America is so little understood by him as his fire insurance. He must buy it, not direct from the corporations, but from a fellow townsman, the authorized agent for these corporations. There are a hundred thousand or more of these local agents—an earnest body of hard-working men—who are not permitted to more than coquette with the vital principles of the business so zealously guarded by those close up to the throne.

The compensation of these local agents forms the greatest burden of expense to the business. They are paid on the gross receipts, almost universally. It is merely the choice of his place of residence which determines the amount of an agent's income. In some jurisdictions he is paid more for living there than he would get elsewhere. The gain-sharing plan whereby the agent gets an interest in the profits he makes for his companies is an abhorrent one to a majority of American insurance managers, many of whom rather resented my intimation that only through some such partnership scheme, uniformly followed by all companies, is it going to be possible to achieve the best results for all.

Even the most casual observer in America quickly discovers, as I did, that in the jurisdiction of the Pacific, whose queen city is San Francisco, fire insurance has reached its highest

development. Here have witnessed the creation and fruition of many great pioneer movements from which the whole industry benefits; here, too, have been endured the greatest heart-throbs insurance suffered. No panoply of words could add to the tribute deserved of San Francisco departmental managers in the greatest crisis their business has known. With hearts of steel they fixed firmly their hopes and their endeavors, and no monument to the mighty achievement at San Francisco which honors the record of fire insurance can be complete without according the greater glory to these courageous men whose deeds and whose triumphs are as those of the "Simple love of greatness and of good, that knits brave minds and manners more than blood."

(Applause.)

The President: There is certainly no question but that the gentleman from Altruria was a very keen observer, and that he saw many things that we in every-day life look over. But there are one or two points that he made upon which I do not quite agree with him. He did say, I am willing to admit, that there are commissioners and commissioners. We have known of several commissioners whom we think a good deal of—in fact, there is one going up for re-election very soon, who, if his election was intrusted to this body, would receive unanimous vote. (Applause.)

Mr. Schively may have something to say to you on what he thinks about "Observations from Altruria."

Mr. Schively: I suppose, Mr. President and Gentlemen, that in order to make an address it is necessary to come to this table and have one's manuscript before him. Accordingly (turning sheet of blank paper) I do so. (Laughter.)

You will remember that when General Lew Wallace wrote his book "Ben Hur," when it came to the chariot race, Ben Hur's rival struck the horses, the pure Arabians of Ben Hur, with his whip. General Lew Wallace says that unquestionably every experience of the past is a benefit at some period in the future. Why was the steadiness of foot and the grasp and strength of arm that Ben Hur had learned at the galley, but for the purpose of aiding him to win that race? When I came to San

Francisco, it occurred to me that possibly the courtesy of the President and of the members of this organization would go to the extent of calling upon me for some few remarks, and, having no subject assigned to me, my mind went here and there and elsewhere, wondering what I could say on technical subjects to technical men. The visit of my friend from Altruria makes it all clear. I had that experience myself. I spent sixty days in that happy country. Those sixty days were coincident, by one of those peculiar accidents of history, with the sixty days of the legislative session of my great State of Washington. And we who were there, thinking only of the ultimate interests of our constituency in the great world outside the confines of that happy land full of sunshine, came to determine upon certain ideals for all of the balance of the world, including one or two for the insurance press and the insurance commissioners. The first thing we determined upon was to manufacture or cause to be manufactured some sort of an instrument or apparatus by which a good thought, properly projected at the right object, would be projected with such accumulating force as that it would penetrate the ulterior and reach the interior of the object aimed at. That object was the brain of the person at whom we were aiming. The first thing that we deemed proper to attempt was to reach the understanding and comprehension of the average member of the Legislature. I want to explain the necessity there. The great question before the branch of the Legislature interested in insurance was this: that the insurance department of the State of Washington for untold centuries had allowed the insurance companies to deduct the item of reinsurance, which was robbing the State of Washington of hundreds of millions of dollars per annum. (Laughter.) First of all, an insurance manager stood up and endeavored to illustrate to the committee and the commission, which happened to be present, this fact: that while reinsurance was allowed to be deducted by the department and deducted by the companies, it was deducted because the tax was paid on the amount deducted by another com-

pany. That ought to be obvious to any special agent—and I am going to refer to specials in a moment, perhaps. But apparently it was not obvious to anybody but this manager. He reiterated it again and again, and explained how it happened. Then, when he was absolutely worn out by the reiteration and repetition of the fact, our good friend Judge Granger, who was there representing some of the insurance interests, took up the same subject. I don't think the Judge has really fully recovered from that effort to the present moment. Finally they asked the insurance department, and it did its utmost, through the Deputy Insurance Commissioner, to make that item clear. It was not any clearer when the Deputy Insurance Commissioner got through than it had been before—to the committee. It happened that a member of that committee was a member of the Appropriations Committee, and he called upon my chief, Mr. Nichols, the Secretary of State, and said: "The Appropriations Committee wants to know how much you want on which to run your departments for the next two years." The committee went to the Secretary of State's office, as Secretary of State, and then came to my department as the Insurance Department. I happened to have before me a report of one of the insurance companies, which I was just about to label and put away, after calling for the just dues to the State from that company. I said to this member of the Appropriations Committee, who was likewise a member of the other committee I mentioned: "I want to make clear to you this question of the reduction of a company's reinsurance." He simply looked at me, but, being a Democrat and in the minority, he had to stand for it. (Laughter.) I said to him: "We have allowed the German-American to deduct so much money here out of its report. Why? Because the German Alliance pays on that." And, having the figures before him, and in my department, where he could not escape until I got it clear, he said: "Is that what you were trying to make us d—fools down there understand?" (Laughter.) Now, you see the need of the gun.

Another thing we determined upon in this visit to Altruria was this: We realized the difficulty of the political appointment of the Insurance Commissioner and his force. We came to the conclusion that we would organize a system such as they have for the education of those who are to enter upon a diplomatic career in foreign countries, we would put them through a course of study, we would make them deputy insurance commissioners for a term, say, of eight years, and then promote them. (Laughter.)

There are many other things I might tell you about that we determined upon up there. One thing was with reference to the insurance department, that we would teach insurance commissioners and their assistants or those associated with them as deputies, as clerks, this fact: that they are to distinguish as to their powers and hold to their powers and not interfere with any other powers. We are very frequently called upon to interfere with the powers of our supreme and superior courts, and issue decisions before the matter has ever gone into court at all. Once in my term I was called upon as a witness, and by the assured. The question involved was this: A policy had been cancelled; the assured wanted it cancelled so that he might go into another company; the company agreed to the cancellation, but charged the short rate. I was called upon the stand before the judge, and I think there was a jury, too, though I forget that fact—embryotic jurors were there, anyway—and I was asked by the attorney for the assured, by whom I was called, to determine the question involved, as to what should be a short rate. The first thing the attorney did was to wave before my eyes a book which I subsequently discovered to be Rate Book No. 4. The attorney said to me: "Did you ever see anything like this? Do you know anything about this book?" I said: "Please tell me what book it is." He said: "It is Rate Book No. 4, issued by your department." (Laughter.) I said: "In a previous generation, or the present?" He said: "I don't know. But here the law says it is established by the insurance law," and in every case the

letters "E. R." are added. I said: "Please show me." There it was, stowed away, and it referred to Rate Book No. 4 issued by the commission. I said to him: "The mention of that book in that law is simply a mistake on the part of the lawmakers. The existence of that book, if it were known officially to the department, might show it to be in conflict with some anti-compact laws that we have passed here. But officially I know nothing about it." "Anyway," he said, "here is the book. Suppose we were to ask you the question as to what should be a proper basis of a short-rating, on the basis of this book, what would you say?" "I would say 'I don't know a thing about it,'" was my answer. "Well," he said, "you don't seem to know anything about that part of the business." "No," I replied. "I leave that to the companies and the special agents. The thing that we are required to know is the law, and to administer the law so far as we possibly can." And the insurance department, gentlemen, of the State of Washington, under the administration of Mr. Nichols and myself, has been trying to do that for the past eight years. (Applause.)

I want to say just one word in conclusion, and that is this: I have been dealing with insurance men, specials and managers and local agents, for eight years. I have learned a good many things from them. I am getting more proficient in the administration of the department in proportion as I bring myself close to the people and close to the insurance interests. When the catastrophe came to San Francisco, it subsequently raised certain questions in the State of Washington. They were getting uneasy up there about the insurance companies, and the department would receive letters from various parts of the State on the subject. Some people became so eager and so earnest as to not be content with writing letters; they came themselves to the insurance department to ask as to which were the reliable companies, which were the companies that paid in full, dollar for dollar, which paid 25 per cent or 50 per cent, and which were the six-bitters, or whatever the terms were. I invariably cut the

matter down to this, and it stopped the matter of questioning within two or three weeks. In reply to the letters I would enclose a list of the companies authorized to transact business in the State of Washington, and respond to the inquiry, "We know no distinction between those companies. We know them only as being all solvent, as paying their legitimate liabilities in this State, and all of them are trustworthy. The companies that were involved in that catastrophe, doing business in the State of Washington, that were not reliable or that went to the wall, have withdrawn, and the balance of them can be trusted by the citizens of the State of Washington." We haven't any further questions up there on the subject.

I want to say with respect to the settlement of these questions this one thing—and I regret that I am taking up the time of some other speaker, but I will close in a moment: We look back in history and find that, at a certain period in the history of the race, there were twelve men selected to show to the world the purity of mankind for generations and generations to follow, and one of them fell out. Possibly that was an illustration of the percentage of manliness, of courage, in that generation—one falling down out of twelve. If that be true, the fact remains that the insurance fraternity, the companies, the managers, the specials, who were called upon to act as adjusters, have demonstrated that in the flight of the years, the human race has advanced, the manliness of man has appreciated, has gone up, because the percentage of falling away in the time of that great trial among the insurance companies was not 1 in 12—it was not even 1 in 100. I congratulate you that that is the fact, and I am willing to continue to do official business for a number of years to come, in whatever the capacity may be, with that kind of men. (Applause.)

The President: The gentleman from Altruria stated that, as early as 1781, the first American company had a clause in its policy that prohibited the insurance of buildings having trees in front of them. As an illustration of the varying ideas of the

American insurer, I would state to you that not long ago I had the pleasure of meeting one of the directors of the Green Tree Insurance Company of Philadelphia, which insures only buildings having trees in front of them.

The gentleman from Altruria also made several sharp criticisms on schedule ratings, and on the secrecy surrounding insurance generally. He also, at the end of his paper, said some very nice things about the Pacific Coast. I would like to have his emissary informed that the Pacific Coast, appreciating what he said and the necessities of his criticisms, has now under formulation a schedule of ratings which will be open to everybody—if it goes through, and I believe there is every probability that it will go through—a schedule of ratings which will be so clear and concise that it can be understood by any man who may take hold of it.

We shall now enjoy listening to a paper by Mr. William Maris, entitled "First Steps."

Mr. Maris: I am certainly put at a great disadvantage, Mr. President, in being asked to address you immediately following two such interesting addresses as those you have had from Mr. Drew and Mr. Schively. I was in hopes that we might wait until the influence of their papers had died away and until after lunch before calling upon me. However, I shall do my best.

FIRST STEPS.

Wm. Maris.

Mr. Koempel, in addressing us "From the Standpoint of an Adjuster," has touched upon the confidence reposed by the companies in the man to whom is entrusted the settlement of their losses and reminded us that in no other line of business does a parallel exist to the adjuster, with his power to commit his employer without accounting to anyone, save his conscience and his God. And yet, while this is true, how little attention is paid to the preparation of the man who possesses all this confidence and all this power.

Every lawyer must plead his first case. Every surgeon must perform his first operation. Every adjuster must settle his first loss. Lawyer, surgeon and adjuster alike familiarize

themselves with the literature of their respective professions, but, while the lawyer has attended actual trials in court conducted by able counsel, and the surgeon has been present at clinics presided over by eminent physicians, the adjuster almost invariably approaches his first loss without ever having before met a policy holder with an unsettled claim.

It has always appeared to me that a great saving to insurance companies would follow the introduction of some system whereby the newly appointed special agent could benefit by actual contact with loss problems under the guidance of some adjuster of matured experience and thus be able to absorb those lessons, which cannot be learned from the mere reading of books. No such method of tuition having been generally adopted, it is evident that my views are not shared by the majority of insurance companies, and it is highly probable that they never will be and therefore, until the end of time, the success or failure of personal experiment will continue as the only means by which the rising generation of adjusters will obtain their practical education.

It is far from my intention to deprecate the value of insurance literature and my agreement with Mr. Moore's enthusiasm on the subject of the library of this Association is most sincere and most hearty, but the field of research is so vast that the treatment of any matter brought to our attention cannot fail to be comparatively narrow and confined and is quite likely to produce an erroneous impression upon the mind of the novice. The solution of a problem taken from the middle pages of a treatise on geometry is readily understood and appreciated by the learned in that branch of mathematics, but how little it means to one who has not mastered the rudiments. After these expressions of my opinion, it may seem paradoxical for me even to attempt by word of mouth or stroke of pen to add to the pages written on the subject of adjusting, but in extenuation of my temerity permit me to say that it is my desire to more especially address the younger members of our association and to confine myself as closely as possible to the initial steps to be taken in the settlement of a loss.

Having upon my mind the writing of this paper, no opportunity has been lost in the last day or two, of getting from the various members of this association their ideas upon the subject and it is really interesting to note the wide divergence of methods outlined as those followed by the different ones who have been interviewed. Each adjuster has his own ideas as to

the proper method of procedure and follows them along what he considers safe and conservative lines to the common end of seeing that the payee gets all that he is entitled to under the contract of the insurance policy and no more.

In view of the impossibility of absolutely outlining any particular course of action to be followed from the beginning to the end of every adjustment or every class of adjustment, it will not be attempted, but it will be my endeavor to repeat in my own words a few of the many pieces of advice given me at various times and followed by me on numerous occasions, as well as make some suggestions born of personal experience. My idea of the initial step in adjusting a loss is to find out all you can about the people with whom you have to deal. As soon as a claim is assigned to you for adjustment, begin making inquiries, and if possible, avoid meeting the insured until you have ascertained his standing in the community, his reputation for integrity and what has been his success in business and what are his habits, his resources and his prospects. Interviews with your agents and the perusal of the local newspapers of current dates will give you much information in regard to the claim and the claimant. Personal friends, between whom and yourself there exists a feeling of confidence, will furnish you with bits of information which may be of great value. The banker is an excellent one to approach. He, like the insurance companies, deals exclusively in contracts relating to money and he appreciates the necessity of knowledge of the client, whether yours or his, and he will, if posted, and he usually is, give you a better line on what you wish to know than anyone else, and will usually divulge his own or his bank's financial interest. Of course this information must be obtained diplomatically and must be weighed carefully, for you always find influence of friendship for fellow townsmen, personal prejudice, self-interest and even mere acquaintance with the insured will color the stories told you by the most ingenuous.

At lunch yesterday, quite a discussion arose between a friend and myself upon this question of visiting a banker. My friend contended that if an adjuster came into contact with the officer of a bank where the insured had an overdraft, that the respectability of the banker and his standing, coupled with his interest, would enable him to impress upon the adjuster every confidence in the insured. My idea, however, is that an adjuster should be able to make allowances for anything that is told him, and should not permit himself to be led astray by one to whom it was evidently a financial object.

MEETING THE INSURED.

Before you meet your insured, if you can do so, visit by yourself the scene of the fire and with the information you have obtained from the paper and the local gossip, size up the situation in a general way, so that by the time you come into contact with the party in interest, you will have a fairly good idea of the existing conditions.

If the insured is a corporation and the loss sustained is more than a trifling one, insist upon some person being made attorney in fact by the board of directors in legal session and obtain a copy of the minutes of the meeting, which copy should be certified to by the Secretary and have this in your possession before you take any important steps in the adjustment.

When you first meet your insured insist upon examining the policies. Do not depend upon your daily report or upon the agent's records, but get the policies themselves and compare them with the copies of reports or records in your possession. If the policies are not all standard form, read the printed matter through and note their differences in terms and conditions, in order that you may be prepared to cope with the situation should it turn out that one policy is effected by some clause in its contract which does not exist in the other policies. See that the fire has occurred after the date of the commencement and before that of the expiration of each policy. It has occurred before now that a loss has been adjusted under a policy which had expired or which had not gone into effect on the date of the fire. Have made for you a copy of the written form of each policy and compare them carefully, noting the differences in wording, not only as to covering but as to privileges granted or warranties made by the insured, and do not accept as a fact that all of the policies read alike.

If you do not represent all of the insurance, ascertain at once if the other adjusters are on the ground or are expected, and if you find that some of the involved companies are not represented, arrange through their agents or through your own office to advise those companies in order that when the actual work on the loss has commenced, all of the companies will have representatives on the ground. Should the adjuster of some of the other companies not have put in an appearance, be careful not to take any action which might be a subject of discussion, but content yourself with proceeding along the most non-committal lines until his arrival.

When all the companies are represented meet the other

adjusters and consult freely with them, and during the entire course of your work do not fail to communicate to them all you know about the case and all you learn from time to time, and even your opinions, for while their companies, it is true, are not paying you, they are entitled to such information as you possess on the broad ground of the common good of the business, and should you find on the loss an adjuster who is more experienced and perhaps more energetic than yourself, do not lay back and let him do all the work, for no matter how small your interests may be, your company pays you to look after it, and you must accept some responsibility, so you should pitch in and carry your share of the burden, and if you are not experienced enough to assist materially, you at least have the opportunity to learn.

Avoid personal discussions on the subject of the loss with the insured unless in the presence of the other adjusters, and do not permit yourself under any circumstances to belittle your co-workers, no matter what may be your personal likes or dislikes, which must never be permitted to influence your actions nor your feelings to interfere with your duty to your companies. And now, just one more word on the subject of co-operation. Remember that while nothing done or said by you can in anyway bind the other adjusters or the companies represented by them, nevertheless such words and actions have an effect upon the general situation, which cannot fail to be felt by those adjusters and other companies, and therefore they should have full notice of any action you may take which is not approved by them, and before definitely taking it, the situation must be carefully considered from every point of view.

You have now reached a point where you have obtained a fair idea of the personality of the insured, the condition of his business, the known circumstances, cause and extent of the fire, the amount of the insurance and the wording of the policies; you are in harmony with the other adjusters, have met the insured and are now ready to adjust the loss.

Now you must keep in mind those terrible twin ogres, Waiver and Estoppel. Be careful to avoid questioning the insured on any point relating to the validity of the contract until you have arrived at the amount of the property loss. If he shows any inclination to make voluntary confession, turn the conversation toward the safe ground of glittering generalities, and if there is at any time forced upon you knowledge which is sufficiently definite to raise the question of liability—stop right

there and consider. Personally my inclinations are strongly in favor of taking a non-waiver stipulation as soon as even a suspicion is aroused as to the most remote possibility of avoidance of the policy. There are many who do not agree with me. Only yesterday afternoon one of our managers shivered with the cold on a corner for a full half hour endeavoring to convince me of the futility of a non-waiver stipulation of any kind, but there are non-waivers and non-waivers. The one used in my work was drawn up by Attorney James Alva Watt, with my poor assistance, some five or six years ago. It is the one which was adopted by the 1906 conflagration adjusting committee, and so universally condemned by the newspapers at the time. It has never been tested in court, but every attorney who, to my knowledge, has studied it, has given it his approval.

But after all it is best to err on the safe side, and my general advice would be to the effect that when you are convinced of the existence of some condition which in all probability voids your policy, communicate with your companies and ask them to instruct you as to further progress.

Trifling losses should be settled in an easy-going way without the insured being permitted to feel too sorry for himself or to take matters too seriously. This off-hand treatment of small claims is almost invariably productive of the best results, and is always far more promising of success in attaining a reasonable settlement than are more ponderous methods. If the loss is very small and the value of the property and insurance thereon are large, never endeavor to add to your laurels by persuading the insured to withdraw his claim, but rather agree with him on the slight damage sustained and take proofs without details and as a compromise. This will effectually prevent a subsequent change of mind on the part of the insured after you have left town and his neighbors have played upon his feelings by expressions of sympathy, difficult to counteract upon your return should he advise the companies that newly discovered damage has made his claim worth collecting.

It is almost the invariable trend of human nature in a claimant to hesitate in putting his property in the best possible condition after a fire. He seems to depend upon the spectacular effect upon the adjuster of seeing wet floors and dripping ceilings, rusty metals and dirty fabrics, charred wood and piles of debris. Then arrives your opportunity of beginning a counter campaign of education, and while you carefully avoid giving any impression of your taking the property out of the posses-

sion of its owner, exercise an assertive inertia and insist on carrying out all the conditions of your policy which cover this point and do not confine yourself to telling the insured, but get in and help, or, better yet, lead, clean up, remove offensive effect of fire, restore order, and you will be yourself surprised at the effect which almost always is marked, on the insured.

Should it be evident that damage is accruing, make every effort to stop the cause. Open the windows and let out the smoke. Get rid of foul smelling rubbish and stop the flow of water. Install oil stoves to dry the atmosphere, and if machinery is involved have it taken apart, dried and greased, informing the insured that while it is imperative upon him to take care of his property, the cost of his taking care is a part of his loss.

If your claim is one involving a comparatively small total loss with an accompanying smoke and water damage, reach an agreement as soon as possible as to the amount of the property destroyed beyond identification. When such an agreement is reached reduce it to writing and have it signed by the insured, so as to place that question beyond dispute. In reaching your conclusion as to this amount, be careful to diplomatically ascertain the quality of the goods destroyed before raising a suspicion as to your object, then the cubic contents of space can be figured and the probable value reached, always remembering that \$50 in cottons will take more room than \$1,000 in silks.

Remember always that the insured knows more about his particular kind of property than you will ever learn, but that you are more familiar with the effect of fire and smoke and water than he. Give him to understand that your education is along the lines of rapidly acquiring information and the ability to ask intelligent questions, as well as to intuitively appreciate the trustworthiness of the answers.

SPECIALISTS.

There are few specialists in the present ranks of our fraternity. There was a time when our recruits came from other lines of business, and among our members were expert machinists and retired followers of other trades, but to-day but few of these can be found among the field men. We must, therefore, depend largely upon expert advisers and appraisers when we feel the need of more information than we possess upon any specific kind of property. But every adjuster should be a nigrer and should have a good working knowledge of bookkeeping.

This knowledge should be broad—not the kind possessed by the recent graduate of the business college, who believes the method taught him is the only correct one—but of that variety which makes it possible to grasp the scheme followed by any accountant. If the insured figures profit as a percentage on his sales, you must be able to follow that method. If he figures ordinarily with freight in, proceed along the same lines. You must acquire a knowledge of bookkeeping sufficient to enable you to figure with freight in or freight out and get the same result. You must be able to figure profits on sales or on cost and arrive at the same end. In other words, you must have sufficient command of figures to be able to follow the methods of any bookkeeper and reduce his figures to the common basis and to which he is habituated, and be able to show him that your final figures are correct by using his own practice and his own terms.

Of course, the easiest way to shift responsibility is to enter into an immediate appraisalment, and, without doubt, many of our younger men firmly believe that a disputed loss can be satisfactorily settled by the appointment of the customary competent and disinterested ones, but our experience on the Pacific Coast is such as to warrant an avoidance of appraisalment wherever possible.

Whenever you do find it necessary to go into an appraisalment, first insist upon the insured placing his property in the best possible condition in full compliance with the requirements of the policy. Do not name as the appraiser selected by the company a man in whom you have not the fullest and most absolute confidence, and, if possible, avoid local inhabitants.

When you are adjusting a claim on a building which has been totally destroyed, remember the clause in the standard policy which enables you to demand plans and specifications. In lieu of this, induce the insured to have prepared a detailed estimate of the cost of replacement of the property. You can always get from neighbors a description of the structure, and with your own measurements can fairly well check quantities of materials, and the price can be ascertained locally, so that you can reach in a loss of ordinary dimensions a fairly accurate estimate of the first cost of the building without incurring any expense.

While a book could be written on first steps, its most diligent study by one whose feet have never ventured over the path of the adjuster would be of less value than a few opportunities to be present with an old hand during the actual work. The few

suggestions made by me, you can see, therefore, have by no means exhausted the subject, though they have my time limit as well as your patience, for which I thank you. (Applause.)

The President: After listening to Mr. Maris' interesting and certainly most excellent paper, I am sure you will all agree with me that there is no reason for his excusing himself for following Mr. Drew and Mr. Schively. I can only wish that we had the time to discuss the many features he has brought forward. But, unfortunately, we have not, and the paper will therefore have to be read by you when printed, to be thoroughly understood.

Mr. Kinne: Before we adjourn, Mr. President, I would like to ask the Committee on Nominations to meet me just after the main body has adjourned. I understand, Mr. President, and I think the rest of you do, that this committee was appointed for the purpose of considering names suggested to them and then making a report. It practically puts the members of the committee without opportunity to make nominations themselves. If any one has any name that he would like to suggest for Vice President only, if they will please confer with any member of the committee, the name will be presented, and we will talk it over and consider all the names and make our report at the proper time.

The President: Undoubtedly the committee will be very glad to receive suggestions. But my understanding of the scope of the work of the committee is not that of Colonel Kinne. The understanding of the chair, and I think the intent of the Executive Committee in making the suggestion in its report, is that the Nominating Committee is a nominating committee to all intents and purposes, and that it shall proceed to name a ticket.

Mr. Kinne: I could hardly serve on a committee of that character. I do not think it is right for any five members of this Association to be permitted to arrogate to themselves the right of naming, as it is understood, the Vice President, who will be the President a year from now. I think the only proper

way to consider it is that any member of this Association may suggest to the committee some name for the office. How do we know the different ones that the Association may desire? I do not want to serve on the committee if you are placing it in that light. I might say in this connection that I did not know the amendment had been recommended a year ago and had to lay over a year. Personally I think the idea is all wrong; I do not believe in the method at all. But I am willing to do my duty, Mr. President, and as that amendment was adopted yesterday morning, and I was named by you as one of the committee, I am willing to act. But I want to know from some of our members who they think will fill the position acceptably, and then we will consider them. I have no person in view myself for the office.

The President: The committee will, of course, outline its own plan of action and procedure.

Mr. Kinne: Then I will state, as the chairman of the committee, that we will receive names, and we will carry out the desires of the Association by naming members for the officers of the Association.

Mr. Driffield: I imagine that this Nominating Committee is the same as any nominating committee of one of our clubs or associations, and that the committee will present the name of some gentleman whom it considers best qualified to serve in the position of Vice President for the ensuing year. That nomination, however, does not carry with it the necessity of election. Any member will then have the right to nominate, and any other member has the right to second the nomination, of a candidate. In my opinion, it would be good for this Association if we did occasionally have a little rumpus here to keep us active. I think it would be a good idea.

The President: The question is before the committee as to what it shall do.

We will now take a recess until 2 o'clock p. m.

AFTERNOON SESSION.

The President: The meeting will now come to order. Have you anything, Mr. Secretary, before proceeding with the program?

The Secretary: I have not, Mr. President.

Mr. Gunn: Mr. President, I want to place in nomination for honorary membership in this Association Mr. Cyrus K. Drew of Denver, Colorado, who read to us such a delightful paper this morning. I think his name should be Cyrus Noble instead of Cyrus Drew.

The Secretary: I second the motion.

The motion unanimously prevailed, and, on motion, the Secretary cast the ballot of the Association for Mr. Drew, whereupon the President declared him elected an honorary member of the Association, and indicated his pleasure in the declaration.

The President: We will now listen, gentlemen, to a paper entitled "Automatic and Other Fire Protection," by Mr. George J. Wellington. (Applause.)

AUTOMATIC AND OTHER FIRE PROTECTION.

By George J. Wellington.

At this time, when keen interest toward construction and protection, awakened by the calamity of 1906, is at its height, a few pertinent and practical suggestions to special agents appear to be in order. Few, if any, of us appreciate bare truths, as, when expressed, pride suffers a deep wound; but, as is the case with cancerous growths, application of torturing remedies almost invariably results in permanent cures.

Following the great disaster of April 18, 1906, when the entire world was extending its sympathy and San Francisco was accepting same with a grateful heart, it occurred to the writer, who had watched the fires from shortly after five o'clock on that eventful morning to their conclusion, that the time was

opportune for direct criticisms—handled without gloves—in order to produce the same benefit as that resulting from a few sharp words to a hysterical person.

Acting upon this impulse, and in response to a request from the British Fire Prevention Committee of London, a report was written, from which the following are a few extracts:

“Observation for six hours, from the top of a tall office building, elicited nothing not already known by fire experts, and demonstrated at Baltimore and other places.

“Unprotected openings of brick buildings, improperly hung and uncared-for metal-clad shutters, ineffective rolling and ordinary iron shutters, were all conspicuous by their weaknesses. Exposed sides of hollow tile fireproofing again cracked away; concealed piping again forced fireproofing away from steel members that it was intended to protect; metal lath and plaster partitions again failed, and unprotected steel was warped and distorted, permitting floors to fall. Tall brick buildings of joisted interiors radiated heat—followed by a fire—to wooden cornices and window frames.

“Cast iron columns stood the test, in most instances, because there was no water to crack them. Stone fronts disintegrated and fireproof buildings were left in a thoroughly damaged condition by their inflammable contents.

“Fire walls surrounding large areas fell, after being deprived of their wooden supports.

“In fact, everything that has been predicted by fire engineers occurred. The bigotry of architects, cupidity of contractors, and penuriousness of owners, laid low the metropolis of the Pacific. The work of intelligent architects came to naught against the creations of incompetent ones. The owners of well-constructed buildings were burned out by their criminally careless neighbors.

“In many instances talent was not engaged on account of its ability to construct permanently and well, but rather for its shrewdness in erecting structures that would earn the greatest return for sums invested. Competition in this respect has led to the use of inferior materials, and the evasion of building laws and underwriters’ recommendations. San Francisco possesses building laws in plenty, which require enforcement rather than alteration. A valuable addition to the present ordinances would be one similar to that in force in some European countries, which penalizes owners for fires that escape from their buildings, affording protection to men disposed to build well.

"Fastened to the ruins are flaming advertisements, claiming superiority for every class of building construction and fireproofing, but in each case the advertiser has been careful to select some spot that was not so seriously exposed as those in which their wares failed dismally.

"Great stress is being laid upon the condition of one office building that was burned out only to the fifth floor. Careful investigation discloses that very low and substantial buildings surrounded it, and therefore it was not subjected to the intense heat and flames that attacked others of class A construction.

"Wooden window frames in this building played their part, and while the interior wood finish was metal clad, the glass in the doors was destroyed, and the hinges, held by screws driven through the metal into the wooden backing, gave way.

"Another building with wire-glass windows in the business district stands practically intact by reason of its private water supply. This building also was not exposed to the intense heat that prevailed in other sections.

"The integrity of brick fire walls, built before the days of advanced business ideas, was not disturbed by the earthquake—demonstrating that class A buildings are not absolutely necessary to prevent spread of fire if proper and honest construction is practiced. Thorough consideration should be given each class of fireproofing and retardents, as both have their limitations. Much will depend upon pride, and the willingness of owners to safeguard their buildings.

"The term 'safe fire risk' does not necessarily mean a class of building that will inconvenience the conduct of business or bankrupt the owner with its cost.

"I sincerely trust that building will not be delayed, by legislation and technical conferences upon subjects already well known, until the keen interest for better conditions has subsided and gone the route following the first excitement after the Iroquois Theatre and Baltimore fires."

This report was rejected by the daily and insurance papers of this country for not being one that would prove an additional "sop" to the simpering public, or, was not accepted on account of the omission upon the part of the writer to enclose a substantial bonus. However, full compensation for an attempt to be a prophet in his own land was received, when the official report upon the San Francisco disaster—issued about two months ago by the United States, Department of the Interior—included the report, introducing it with the following:

"The writer, being a native San Franciscan, certainly cannot be accused of prejudice toward his own city."

The preceding is not intended as an apology for the remainder of this paper, but will suffice to pave the way as an explanation of its purpose.

Modern business practices have specialized to such an extent that the "all around man" of former times is out of place, and finds little, if any, recognition.

No architect can at this time be master of all technical and practical engineering knowledge, both correlative in the construction of buildings. No engineer can acquire the training that will fit him for all branches of engineering, nor can a special agent assimilate the detail of all classes of business and professional pursuits. Marked changes in business methods have taken place since the days that the special agent rode stage coaches and horses, officiated at funerals, weddings, sick-beds, births, and assisted in other domestic duties; sung psalms, preached sermons on Sunday, and played poker with the bar-keeper, parson and gambler at the same sitting; then on Monday "bossed" buildings, and even assisted, in his shirtsleeves, with the actual construction; studying all the while how to get enough rate out of the owner to compensate him for his kindness and energy, and enable his company to pay a total loss upon that particular building, leaving a profit to the company and a dividend for the stockholders.

The first radical change from primitive methods came with the organization of boards and rating offices. Inspection bureaus and independent adjusters followed. At this time engineers with special qualifications are engaged by the underwriters for intelligent care and advice in matters pertaining to construction and protection of buildings.

• Some insurance companies are employing, individually, inspectors trained for the supervision of proper installation and maintenance of fire protection. So are large corporations alive to the importance of engaging specialists in each department of their business. In fact, executive ability is recognized in men who are possessed of only a general knowledge of the methods employed to produce results for the charges entrusted to them, and who are sufficiently broad-minded to avoid meddling with details of which they have no accurate knowledge.

The special agent is training for an executive position, which, when acquired, will not only honor him, but will also remunerate

him in substance, and, if achieved solely through ability, will be permanent in stormy as well as fair weather.

Why, then, should the special agent of to-day attempt further interest in automatic sprinkler and other fire protective installations than to acknowledge their efficiency and strive toward educating the public to the importance of only high standard equipments. The gratitude and loyalty of owners—which means control of their lines—will naturally follow. This course will accomplish results which the real Mutuals will do for him if the opportunity is neglected.

The exchange of sprinkler equipments for insurance is an acknowledgment of lack of quality in one or the other, and, very frequently, in both.

A request for an expression of opinion in this respect from the Denver Insurance Report did not meet with response, as, at the time, the facts would have been received as prejudice upon the part of the writer. But, now that sprinkler equipments are being offered upon this coast as "green trading stamps" by pseudo mutual insurance companies, the public, who look to underwriters for guidance, should have at least an honest opinion, which may be borne out by practical demonstrations.

In other words, the tendency of Americans to get something for nothing, or to make wealth along lines of least resistance, is not confined solely to the late Mayor and his Supervisors. Ignorance and bigotry are as culpable as graft, the results ultimately being the same.

Owners of plants should first be impressed with the importance of safeguarding their property, both by fire protective features and the elimination of deficiencies, for their own satisfaction, to a point at which they feel secure from fire loss. Favorable insurance rates are bound to result as a reward instead of a bribe, the latter being only of temporary advantage to the owner, and producing excessive loss ratios for the insurance companies.

By such a course, which would show an unwatered surplus, Uncle Bill Sexton could no longer dwell upon the rate that was reduced for a sprinkler equipment installed in the next county to the one in which the risk is located. There would no longer be occasion for the manager of a large sawmill on Bellingham Bay stating that he "did not care a damn" if tin pipe was used for his equipment, as long as the underwriters would pass it.

The fallacy of expecting a sprinklered building to withstand fire from an unsprinklered exposure, as was demonstrated by

the burning of dry kilns at Stetson & Post's plant in Seattle, and the destruction of the Excelsior Redwood Company's mill in this city, not to mention all the sprinklered buildings in the burned district of San Francisco, would be equally proven by unprejudiced absolute knowledge.

The dispute as to whether or not the water was turned on at Port Blakely when the mill burned would not have arisen, nor would the pending suit in which your companies are involved have followed the disagreement in adjustment, if a post indicator valve outside of the building, instead of a cheaper arrangement, had controlled the sprinkler system.

It would be far more expedient for insurance men in general to advocate fire protective equipments engineered and installed by parties whom they absolutely know are conducting their vocations along lines of high standards, instead of permitting themselves to be influenced by hearsay, personal friendships and ulterior motives.

Fair competitions in merit, not hampered by the kindly interest of well-meaning friends, will do away with the frequently expressed opinion that the insurance men are interested in a pecuniary way in the exploitation of the sprinkler business.

Special agents who desire to be in a position to quote approximate costs for equipping with sprinklers are really wasting valuable time, as, while it is their intention to furnish information for the benefit of their companies' policy holders, very often misleading impressions are made, and when estimates are furnished by installers the owner considers he is being held up by a trust, and, either rejects the proposition, or submits with poor grace to what he considers the inevitable.

One local sprinkler installer who makes a practice of off-hand estimating, has admitted upon several occasions that his company did not know until the completion of an installation what the actual cost would be. From other remarks made by the same man it would appear that the cost exceeded the price charged the owner about as often as it netted a profit.

How, then, can a special agent, whose time is devoted almost exclusively to other matters, furnish an approximate cost for a standard equipment to an owner?

Some sprinkler concerns use cheap apparatus, materials and labor, while others use devices of quality and employ only the best of labor and materials.

During the past four years numerous requests for information about sprinkler equipments have been received from in-

insurance men, and it has puzzled the writer somewhat to determine why the knowledge was sought, unless the applicants contemplated entering the business. If all who inquired were seriously considering the step, it is gratifying to know that some experienced a change of heart. There is a wide field to develop upon the coast and room for others in the business who intend to make it a life study and not a pastime, although upon this point, judging from personal experience, other sprinkler installers do not coincide with my views.

While upon this topic an extract from a paper presented before the Structural Association of San Francisco will no doubt be of interest. It reads:

"The fundamental principle of fire protection is the elimination of causes of fires; second, the reduction to a minimum of combustible materials; third, the confining of fires as much as possible to points of origin; and last, the provision of means for ready extinguishment. All of the features mentioned receive substantial recognition from underwriters' boards and associations, and should receive from owners as much, if not more, attention than anything else in the construction of buildings.

"Earthquakes are due to natural causes, their occurrences are uncertain and cannot be prevented; while fires are a common enemy, and may in every instance be provided against.

"A fire protective engineer's first consideration should be the proposed occupancy of and the exposures to a building. His work should commence with the principles in the order as mentioned in the beginning of this article, and should accompany that of the architect and structural engineer from the first lines drawn upon the plans.

"Proper consideration at the time of preparing building plans permits of valuable economies in the costs of installation of private fire protection, and also the elimination of penalties imposed by underwriters' rating schedules. Portions of savings thus effected may be devoted to better quality, which, in any event, cannot be overdone. Not being essential to the conduct of trade or manufacture, fire protection is the most neglected of all adjuncts to a building; therefore, the necessity of its being as nearly self-sustaining as possible, and foolproof.

"Each class of hazard requires different treatment, and no general rule can be applied. Fees for this, as well as other classes of engineering, should be based upon gray matter and not upon quantities of materials used.

"Many property owners seek to minimize costs of construc-

tion by contracting with the lowest bidders. Costly extras, repair and maintenance bills with high rates of insurance invariably result. San Francisco, of all municipalities, should realize from past experience the fallacy of building in any way other than of the best."

Through the process of elimination I have endeavored to establish the relations of special agents and others not directly associated with installations of automatic and other fire protection.

The engineers of the Board of Fire Underwriters pass upon the apparatus upon its completion by installers, and also watch the deterioration. Therefore, the only duty for a special agent, which is the most important one outside of advocating standard equipments, is to make sure that it is kept in effective operative condition.

From the number of special agents and inspectors who visit each sprinklered plant, it would appear to be impossible for a serious fire loss to occur, or a system to remain long out of order, if each pays close attention to the service in which he is qualified to act.

The water supplies, being of the most importance, should have the closest attention. Where gravity flows are used, the knowledge that all supply valves are open and strapped is all that is essential. Indicators are unreliable, and the opening of filling valves until water overflows is the surest way of determining that the tanks are full.

Where pumps under automatic control are used it is best to have the superintendent of the plant or his engineer make the test, at your request, as all the special agent needs to know is whether or not the pump works and supplies water when needed.

On dry systems the air pressure should never exceed thirty pounds, that being the maximum required for a standard equipment. Excessive air pressure, which is necessary with faulty systems, delays discharge of water too long after fusing of a sprinkler head.

With examination of hose lines to see that they are complete and attached to hydrants, with pet cocks open to detect presence of water beyond gate valve; ascertaining that chemical extinguishers have been re-charged within the year; with testing sprinkler alarms; seeing that stock or alterations do not obstruct distribution from heads, and noting unsprinklered exposures erected since the last visit of board inspectors, the spe-

cial agent has most ably assisted in the maintenance of proper conditions, valuable alike to owners and insurance companies. (Applause.)

The President: In Mr. Wellington's most delightful paper he has reiterated what I stated in my opening address, that the field for specialization is becoming greater all the time, and that the necessity for the employment of trained engineers to supervise not only sprinkler risks, but all classes of fire protection, of water supplies, of hydrant and main pressures, are becoming more apparent all the time. It opens a new field for the thoughtful man in the insurance business, one that will undoubtedly grow as the business increases throughout the United States, and especially on this coast, where up to this time we have had comparatively few sprinkler risks. There is no one in this room who understands more thoroughly sprinkler equipments and their benefits than Mr. Robertson of the Board, and I should be very glad if he will give us some ideas along the lines covered by Mr. Wellington's paper.

Mr. Robertson: Mr. President and Gentlemen: I would be very remiss if I did not voice my approval of Mr. Wellington's ideas. I think that the points which he brought out about the employment of specialists in connection with those buildings are very well taken. I followed with great interest, in the line of my business, the construction of a number of buildings in this city, and have made a note of the difference between those in which the architect was assisted from the inception of the work, from the others in which he was not so assisted. Leaving aside the question of mere texture of the building in the ordinary way, such as the fireproofing of the columns and girders and members of the building of that description, and the protection of the vertical openings of all kinds, which are extremely important, the mere fact of providing for the necessary water supply for a sprinkler equipment has engaged my attention as frequently as any one point. Some people seem to think that when you put up a building, you need not necessarily provide for those things; that after a while, if it seems to be required, if the rate is too

high, you can put in the sprinkler system then. A gentleman who runs a factory here asked me to go out and see what I could do toward reducing his rate, and that perhaps he would like to have a sprinkler system. I went to see him. He had a large frame structure, three stories in height, with a shingle roof. I said: "It will stand it, and if you have got a place to put the water, all right." He said: "Go up on the roof," and we went up and looked around, and I scanned the construction as I went through the attic, and I didn't see anything in the entire structure that would begin to hold a sprinkler tank. I said to him: "Those won't hold the tank. For this area you would want at least 15,000 gallons of water, and maybe 20,000. Water weighs about 200 pounds to the cubic foot." He spread his legs out, and pounced up and down a bit, and said: "This is a pretty solid roof. I think a tank will go up here all right." That thing actually occurred, gentlemen, as I firmly believe that many people take that view of a sprinkler tank. He did not put up a sprinkler system, because there was absolutely no support for his tank.

In this present time we are confronted with the necessity of putting up two supplies of water on the building, because we can't get the city water. The tinning weighs something, and the water weighs something, and a very small sprinkler system will require 12,000 gallons of water, and a pressure tank which will hold 3,000 gallons. You can readily see that it requires some support to lift that up into the air and provide for the pressure, and also for earthquake disturbance, which we are very likely to have here.

From this building it is possible to see several structures, good, bad and indifferent, and I am at present engaged in a very lively scrap with at least one man to make him take down the truss he has up and put up another one.

I only mention these things to call your attention again to the necessity of specialization and to the employment of specialists to work with the architect. It is absolutely essential. I don't

know an architect who gives his time to that sort of thing. The architects are a fine lot of people, well informed and instructed, but they do not seem to see the necessity for this. They want to make a building beautiful and have it pay a good interest, and there their duty seems to end.

Mr. Wellington's other remarks are all good. I wish particularly to thank him for his ideas expressed to special agents. You know a good many special agents, and they are all good fellows. All those I know are good fellows, and they give me no end of assistance. The special agent who will note carefully the condition of a risk as he sees it, and as Mr. Wellington says, who will look at the water supply and observe the various features, can be of the greatest assistance to the Board, and, through the Board, to his company and to others.

It is not necessary in making a sprinkler system inspection to go further than to note the very things Mr. Wellington has called attention to, because the other things have already been noted. If the system was in good condition when it was put in those things have been taken care of, and it is not necessary to go into them, which will take a good deal of time. For that reason I think his remarks in that direction were particularly well timed and appropriate.

I do not think of any other point in the address which seems to call for any expression from me. I will conclude by thanking Mr. Wellington for taking up the features that he has, and so thoroughly handling them.

The President: There are a number of gentlemen here representing companies who make a specialty of sprinkler business. It must be that some of them would like to ask Mr. Wellington some questions in relation to his paper, and I am sure he will be very glad to answer anything that may be asked. I see Mr. Dennis. Perhaps he would like to ask something.

Mr. Dennis: No, I have no questions, Mr. President. I enjoyed the paper very much.

The President: If there are to be no further remarks in

connection with the subject of that paper, we will now listen to "Schedule Rating," a paper written by Mr. Alexander Field, which will be read by Mr. Staniford.

Mr. Staniford: I regret very much, gentlemen, that Mr. Field is not here. This is a semi-technical paper, and the writer of it would undoubtedly give it more force in reading than can I.

SCHEDULE RATING.

Alex. Field.

Do not let the title lead you to believe that this paper will suggest the best of the many schedules for special rating in use, or under consideration. While fire insurance schedule experts throughout the country have been championing the advantages of the Dean, or Moore Universal Mercantile schedule, underwriters of the Pacific Coast have under consideration a proposed new schedule for specially rating the brick, or steel mercantile building, or a possible modification of our present mercantile schedule to meet the need of a more specific application of this schedule to modern building.

At the time that the Brick Mercantile schedule was adopted by the Board of Fire Underwriters there hardly existed, within the territory under its jurisdiction, one of the structural steel fire-proofed buildings, termed under city building ordinances, Class "A" construction.

Those of us who have applied this schedule, therefore realize that its formula lacks specific provision for this construction. It is, however, only fair to the schedule to state that intelligent application to modern buildings has produced fair and consistent rates, wherever capable guidance has been in control. The great difficulty has been to establish a uniform system of application to reconcile the schedule to a construction not specifically provided for in its formation, and for which only the remarkable elasticity of this schedule permitted it to be used. Such revision would therefore place this schedule on a better status for comparisons with other methods of rating, and produce more uniform and consistent results.

Since this paper will treat principally with the application of schedules, by men rating, for insurance companies, permit me to outline a few observations made during many years' experience in the service of the Board throughout its entire territory.

CONSISTENCY IN RATING.

One, if not the most important consideration to be observed in establishing special rates, is to preserve consistency, or prevent unfavorable comparisons, with other ratings on a similar class of risk formulated under the same schedule.

There is no saying more true in connection with rating work than "that comparisons are odious," they are the bane of a Board of Surveyors' existence.

Some owners or builders will compare ratings established on their property with every building which suggests to them an unwarranted difference between the rates, irrespective of class, condition, or relevancy. The Board is therefore at times compelled to treat seriously unjust criticisms or absurd arguments which assail the justice of a rate, but the rater must be careful in his work that the result is not open to merited criticism and inconsistent differences by fair comparisons. To attain this end two conditions are necessary; first, that the man behind the schedule must consider rates on similar risks, and secondly, to be provided with a schedule sufficiently adaptable or elastic to reconcile application of the schedule to produce required results. There are conditions existing in the insurance business in every part of the country where the exigencies of our business demand somewhat arbitrary handling of a rate and a departure from literal application of schedules. This statement is particularly relevant when an arbitrary rate must be named to protect insurance interests, and the self-respect of insurance companies maintained by adopting the schedule to the needs of the occasion. It is also true that such rates establish a standard for comparisons which makes consistency most difficult to observe. This situation is handled with less open disregard for the principles upon which methods of rating are based, when the schedule used permits of sufficient latitude for the element of judgment to form a feature in its application. The cases above cited are, however, remote, and would not interpose a serious objection to any good schedule. We have, however, in treating so large a classification for rating as mercantile business, a multitude of conditions and contingencies surrounding these buildings, so varied that the judgment of the man applying the schedule is a most important factor to secure reasonable results. There are certain structural defects common to buildings of any class for which an exact or fixed scale of charges can be made to consistently fit the majority of cases; but there are other and most important features requiring treatment by the schedule that are

most complex, and tables providing for charges to cover these hazards have been within my experience simply approximate, with judgment to correct their inaccuracies and modify the result. This statement refers especially to unprotected opening, exposure, communication, area and occupancy charges.

A new man in handling the mercantile schedule has his greatest difficulty with unprotected opening and exposure charges. The schedule provides a table for these charges based on a percentage of the rate of the exposing building for each foot that the intervening space is less than a certain established distance supposed to be beyond exposure danger, and these percentages modified or increased by general provisions for height and area of the exposure. With an automatic or sliding scale of charges (yet sufficiently minute to apply a fixed charge, formulated on the above principle), is attempted to cover a condition which differs in almost every instance, with the result that there are innumerable cases for which these tables do not provide, and must be disregarded as being more than approximations or as a working guide.

I am not assailing the principle upon which these charges are based. It seems an excellent one, and the best theory so far advanced, but I do claim that there are certain features in connection with schedule rating which must be left largely to the judgment of the man making the inspection and rate.

The statements in the above paragraph also apply to area, communication and occupancy charges, but these latter are not such aggravated cases or of such frequent occurrence.

Again referring to modern construction fire retardant, such as reinforced concrete or steel fireproofed buildings, and we have inconceivable differences which are practically impossible to include under a schedule which is not too cumbersome. Two reinforced concrete buildings may differ in method of construction to the advantage or detriment of the building when attacked by fire, as between a brick and frame building, and it would probably be necessary to incorporate into a schedule the building ordinance of the National Board of Underwriters to define a standard building of this construction. We find apparently small points of difference in construction between structural steel fireproofed buildings, such as kind and thickness of fireproofing, character of work in applying fireproofing, portions of a beam such as the lower flange of the beam unprotected, and numerous other variations which constitute the difference between first-class and indifferent construction, with the result that one with-

stands the severe fire with comparatively small loss while the other has collapsed.

Do you believe that any schedule can be formulated to provide specifically for the innumerable different features even restricted to the so-called class A building? Try to briefly describe a class A building so as to distinguish it from a class B building, and, having succeeded, then provide specific charges for the difference in the classification of the two buildings. Again, unless judgment is used in handling a schedule, note what a great injustice would be done to the building which departs from a standard building in some minor detail, to be penalized to the extent of being reduced to the next lower class when all classifications must be in a measure arbitrary.

It has been stated at different times, and there are probably men sitting in this meeting who believe that a schedule can be formulated to cover a certain class of risk which a carpenter can apply as well as the man trained in schedule rating.

We will take for example the two most detailed schedules in use on the Pacific Coast, the woodworking and packing house schedules, and note the application of both. The woodworking schedule was ostensibly made to produce satisfactory rates for the saw and shingle mills of the Northwest, but was afterwards extended in its application to provide for all woodworking plants, a broad classification including a great diversity of hazard. The man inexperienced in rating attempting to follow this schedule literally will make errors in judgment while technically applying the schedule correctly, which will produce absurd results.

We have known new men in board work to rate a power carpenter shop at about the same figure as a large sash and door factory. For instance, a risk contained two or three machines such as a planer, sticker and band saw; for which a charge was made of \$2 for the lack of blower conveyors, this charge being maximum, and would be adequate for large and extensive woodworking plants. The schedule under this item does not authorize a modification of this charge to meet less hazardous conditions, but states for "dry timber planing and box making without approved blower system, \$2, and same with approved blower system, \$1." Then we have a small woodworking plant with few machines, taking a basis rate of \$3, or the same basis as a piano factory, and which basis would in a measure provide for the hazard of work incidental to the business, penalized \$2 additional for the lack of blower conveyors or \$1 additional when equipped with apparatus to safeguard this danger. The man soon

learns with experience that there are woodworking plants and woodworking plants for which the schedule charges or credits are excessive in some cases and inadequate in others.

We had very pertinent illustrations of the application of the detailed packing house schedule in Los Angeles. The schedule was handled by as intelligent and capable men as will be found in any rating bureau in the country. Under instructions to apply this schedule literally, the results were most inconsistent in some cases. The Maier Packing Company's plant, pronounced by Eastern experts to be one of the most perfect small plants in the world, both as to construction and segregation of hazard, was rated under this schedule strictly applied. Briefly, the buildings are reinforced concrete construction throughout, including floors and partitions, detached boiler and power house, segregation of smoke houses, lard making, killing floors, cutting and packing rooms, and cold storage rooms, by reinforced fire walls, outside stairway and elevator rooms, detached buildings under city fire protection, and with good private protection in addition. The rates made under this schedule absolutely precluded any insurance being placed on the risk. A prominent Eastern representative of one of the large companies called about the time these rates were calling down denunciations on the heads of the Board of Underwriters, and stated that this plant would be rated for about one-third of the present figure in the East. This was interesting news, since the schedule had been adopted from the Eastern packing house schedules, which were said to be sufficiently elaborate to cover all cases and were strictly applied. If any rater established a rate of one-third the rates then in effect under this schedule, he choked the schedule to death. When I came to revise the ratings and place them at an equitable and consistent rate, as compared with other packing houses rated under the same schedule, I left the schedule at home.

These illustrations do not condemn either one of the schedules discussed. They are excellent guides for rating, and when applied with proper judgment produce entirely satisfactory results. But no matter how elaborate a schedule, there are always conditions unprovided for even within a limited classification of business, and when we deal with larger classifications the differentials are inconceivable.

Return for a moment to the packing house schedule. Probably the most minute schedule in use on this coast, covering eight pages of small type, and while providing for numerous hazards

of the business, ignores one of the most important features of construction to lessen, perhaps, the greatest danger of all. The construction of floors in slaughter and packing houses of non-combustible, non-absorbent material, such as concrete or cement, prevents the floor from becoming soaked with grease and dirt, thereby not only eliminating one of the causes of fire, but retards the spread of fire; while the wooden floor, even of mill construction, soaked with grease, so accelerates the flame and intensifies the heat that the best construction will avail little.

SIMPLICITY OF SCHEDULES.

It has always seemed to me of the utmost importance that the rater should not only have the ability to properly apply a schedule, but should understand the principle on which the schedule is based. This knowledge produces better results in rating and enables the man to explain a rate to the public.

There is no man so valuable to a board office, or to the insurance companies, as one who has the happy faculty of satisfying the owner or interested party that his rate is just and consistent. To be able to convince the public that the system of rating in vogue is based on common sense principles, and that the system has been fairly applied to the individual building, gains the respect of the public for the insurance companies. I have known board men who were perfectly frank with the public in reference to ratings, taking the trouble to give an intelligent interpretation and explanation on all points in question, showing that charges or credits had been applied correctly and with judgment, and what changes could be made to reduce the rate. I have seldom seen a reasonable man leave the board office, under such circumstances, dissatisfied. The result is more far-reaching than smoothing the path of business for all concerned; it generally secures the betterment of the risk by improvement, to the benefit of the entire community. On the other hand, different handling of the public will produce different results. I have known a board man to close up like a clam, make no attempt to either explain or defend a rate that was criticised, and the assured leave the office dissatisfied, ugly and firmly convinced that insurance rating was either guesswork or a holdup, and not being in a charitable frame of mind, was probably inclined to the latter belief. Such treatment of the owner or insurer places obstacles in the way of business, and does not secure improvements, for the man believes that he could just as well receive a more favorable rating under existing conditions and would be spending money uselessly for improvements.

There may be a sentiment to-day among insurance companies, as expressed by the immortal words of Commodore Vanderbilt, "The public be damned," but this present condition is temporary, and the time will come, and is not far away, when the protest of the assured will be heard and considered.

The board surveyor comes in contact during the course of a day with some of the brightest men in the community, keen minds that will absorb a theory of rating with surprising quickness, and who are equally alert to pick out a flaw in an argument. They are willing to be convinced when conviction carries common sense and reason with it; therefore, a simple logical principle of rating is easier of explanation and more readily understood than the schedule evolved by more tortuous paths of reasoning which attempt a wider scope and greater accuracy, with inconsequential differences and dubious equations.

FIRE AND WATER REPORTS IN CONNECTION WITH SCHEDULE RATING.

This side of board work has the most important bearing on insurance rates established for a city, by either fixing the key rate or basis from which charges are made, or by deducting from gross charges percentage credits for the fire-fighting facilities available.

The improper handling of this subject can disturb the entire consistency of rates in various places, and will prevent the most perfect schedule formulated from producing adequate results. There is great danger in applying this schedule inaccurately, for the entire rating of one city, as well as the rates in neighboring communities, will be affected. There are no comparisons in connection with rating that are more closely drawn or jealously guarded than the relative merits of fire protection between municipalities. Rates inconsistently low for a city brought about by excessive credits under the fire and water report mean that in time ratings in neighboring cities will be reduced proportionately.

In reporting on city fire protection the necessity for a trained man is essential to avoid blunders which may have a far-reaching influence on the business. This man must not only have the technical training necessary to handle the engineering side of the subject, but the general insurance conditions which must be considered as forming an important part of the report gives the subject a broader scope, requiring more general knowledge than any branch of schedule rating.

There has been too much attention paid to the detail of the report and too little to the detail of conditions on the ground in handling this subject by surveyors. To arrive at a town in the morning, make a cursory examination of the water company's map, a superficial examination of fire department apparatus, location of hydrants, and decide on this data the same day, that the protection is worth 33 1-3 per cent from schedule, is a good deal of an undertaking for a trained hydraulic engineer, much more so for the man of limited experience. There was a happy and easy solution of this difficulty used by some surveyors (not at the present day, however), that if mains in mercantile district were 8 inches or over they were adequate, if 6 inches they were inadequate, irrespective of local conditions. Under certain conditions a well-installed system of looped 6-inch mains, with proper location of hydrants and standard type of hydrant, will give better service than as in one instance which I can recall the service from a single 16-inch main in the business district. A standard size for water mains for efficient fire service depends absolutely on conditions which will differ in every city, and there is positively no fixed diameter of mains for mercantile districts which will apply to all cities.

There are tables computed by eminent authorities basing the number of hose streams to a block on population for efficient fire service, which, when modified to meet the specific locality, afford an excellent standard for required service. With the number of standard hose streams established which will give the fire department proper facilities for coping with the general fire which conditions indicate as probable, the next investigation is to determine whether the water system will supply this demand, over and above usual draft on the system, and whether available fire apparatus, including hydrant service, is sufficient to handle maximum number of streams from delivery mains. There is one very practical method of settling the question, and that is to turn out the department and attach hose to hydrants within a given district until the efficiency of the water streams begin to reduce, indicated by drop in pressure gauges. The result can be very closely approximated by proper application of engineering formulas if the man is equipped to handle the subject. In either event it is information which it is essential to obtain to properly apply any system of rating, and the subject should be treated with care and ability.

The ability to handle the technical side of this question is of great advantage to underwriters, because the inspector who can

talk intelligently on water systems and fire appliances convinces, and such conviction quiets clamorous protests from public and agent, lessens the number of resolutions presented to the executive committee by public bodies, and, best of all, secures improvements, which justify reductions of rates for the benefit of all.

Do not gather the impression that I am opposed to schedules, or wish to send a man to inspect a risk or establish a rate without schedule training and without a schedule to guide him. On the contrary, I believe that one of the crying needs for insurance ratings on this coast is the adoption of well drafted schedules to provide for some of the large and rapidly developing manufacturing industries of our section of the country, such as flour mills, cement plants, textile workers, iron workers, electric power plants, etc., each having an individuality worthy of special treatment by schedule, and which are rated to-day by methods which could be characterized as groping in the dark.

No intelligent man who has had experience with rating can doubt the efficacy of simple, logical schedules, detailed where detail is possible, elastic when judgment must be used to provide for unusual or unforeseen contingencies, in order to produce satisfactory results.

But do not minimize the importance of the man who applies the schedule. His judgment must always remain the balance wheel which will adjust the tendency of the most perfect schedules to fly off at a tangent when applied mechanically.

The man in the employ of the board who is well equipped, and has acquired a general insurance knowledge which enables him to reconcile theoretical rating with the practical underwriting phase of the business, is worth keeping. He can be made a valuable instrument in the hands of insurance companies, for their missionary work of education, for improvement and protection, lessening the great fire waste, and averting those appalling calamities which bring death and sorrow to every door and leave the destruction of man's greatest achievements in their path. (Applause.)

The President: No one is more qualified to write on the subject of "Schedule Rating" than Mr. Field. He told me, when he agreed to write this paper, that he would upset a good many of the theories that I had talked over with him in times past. He has done so very effectively, and he has undoubtedly upset the theories of some others of us here. I would like to ask Mr.

Herbert Folger if he will in any way comment upon Mr. Field's paper.

Mr. Herbert Folger: It is very difficult to discuss a technical subject of this character without preparation. As a whole, the paper which has just been read is the best presentation of the subject to which this Association has listened, but a careful reading of the paper would be necessary to comment upon it intelligently and with justice to the writer.

Speaking generally, schedule rating is simply a method of making rates, so that the better business of a class will receive a lower rate, and the worse risks a higher rate, than the average. Time was, thirty years ago or more, when the merchants of any large city were accustomed to call upon fire insurance agents to inspect their stocks of goods and fix rates upon them on the ground; for example, for a paint stock in a brick building, the rate might be \$1.80 per annum; upon a dry goods stock \$1.30, or some other inflexible figure, and so on. The best brick building was treated no differently than the worst, exposures being equal. The time has passed for this, and while, as Mr. Field claims, there will be differences of opinion as to the propriety of a single rate, the general trend of rates is in the right direction, and is much nearer consistency than ever before. It may be true that the rate of 53 cents per annum, quoted for the carpet stock of D. N. & E. Walter & Co. before the conflagration, was too low; and there may have been others who believed that a Kearny street stock at \$1.29 was too high. Differences are almost inevitable—the main thing is to establish an average rate on a class so as to leave a margin of profit for the companies and to treat the different risks equitably.

When it comes to the question of the effect of details in a long schedule, and in the survey of a building containing numerous occupancies, it is nearly always true that the non-hazardous risk will get a fair rate—perhaps lower than it deserves. It is certain that a hazardous risk will always get a high rate. The most conspicuous instance of this in the last ten years was the

result of applying the shingle mill schedule in the Pacific Northwest. If I recollect rightly, the lowest rate quoted on several hundred shingle mills was about 5 per cent per annum and the highest 20.65 per cent. No one believes that a risk at 20.65 per cent is insurable, or should be written by any insurance company. The rate merely implies that nearly all the charges provided in the schedule were applicable to the risk, and it must have been one representing a combination of about all the bad features which could be found in shingle mills. Many charges of 20 cents, or 80 cents, or \$2.00, are not the true measure of the hazard charged for, respectively. The main object in preparing these schedules is to induce the insured, by drawing his attention to each particular hazard, to remove it and thus save part of his insurance premium.

While I may be wrong, the impression left on my mind by the reading of the paper is that the writer believed a surveyor could throw aside a schedule, go out and rate an important risk, and probably obtain a much better rate than otherwise, by the use of his private judgment. This is true from his standpoint, for the reason that Mr. Alexander Field is a careful and competent man, who has been trained in the service for many years, at the expense of the insurance companies, to do surveying and rating; and, at the end of ten years, he is able to do it well. This is a fair answer to Mr. Field's suggestion, and he will be one of the first to admit that, if one of the men in the insurance offices, however experienced, were to attempt to estimate a rate by judgment, he could not do it as Mr. Field would. There is a great difference between the judgment of a man who has the elaborate details of a system at the ends of his fingers, and is unconsciously governed and guided by them in forming conclusions, and the judgment of another man, however intelligent, who is without such knowledge and training and who attempts to form what could merely be called a common-sense opinion. Mr. F. C. Moore, who has probably done as much work on schedules as anyone in the United States, once attempted the

experiment of asking the members of his Schedule Committee to give an opinion as to the proper rate on a given risk, or the proper charge in the schedule for a given hazard; and he found that scarcely any two of twenty-four members gave the same figure.

Mr. Field makes much of the importance of simplicity in schedules and suggests that it is desirable to have those which are simple and logical, but, at the same time, detailed and elastic. While everyone agrees that simplicity is greatly to be desired, it is quite unlikely that the time will ever come when schedules can be greatly shortened. Indeed, the tendency is the other way. It must not be forgotten that, while hazards are being more carefully studied every year and new causes of fires are being discovered and charged for in schedules, there is a corresponding increase in the improvements which can be made in mercantile and manufacturing hazards and in the demand for a credit for every one of such improvements. It would be easy enough to make up a schedule which could be used by a carpenter in estimating a rate on an unexposed two story brick building with one occupancy in a country town; but no one will contend that simplicity can enter into a schedule which is consistent and equitable and which will answer for the rating of a fifteen story mercantile building in San Francisco, with most of the modern improvements in construction, interior protection, etc.

The Board can do no better service to the companies, which pay its expenses, than to train men like Mr. Field in the surveying and rating department; and when, in the course of years, they elect to impart some flexibility to the schedules, by using their trained judgment, the effect will be of benefit to us, and we can safely follow their judgment.

The President: There is probably no feature of Board work in which I have taken quite as much interest as I have in that of schedule ratings. As I have stated, Mr. Field has upset to a certain extent a good many of the theories that I have heretofore entertained on that subject. I am firmly convinced, how-

ever, that the time has come when the schedules at present in use must be very much simplified, so that, with proper credits or charges for deficiencies such as lack of water supply and improper building, the schedule can be so arranged that the average intelligent architect, or, in fact, the average intelligent property owner, can almost at a glance determine what credits or charges will be made to or against his proposed building. If we can accomplish a schedule of that kind, one that will be simple and yet thorough, this Association and the Pacific Coast will have gone farther in the way of schedule ratings than any other section of the United States. All over the remainder of the United States the Moore and Dean schedules are now being used almost entirely. They are undoubtedly better than any schedule that we could get up here, so far as the details of minuteness are concerned. But they are too cumbersome for the average man, too cumbersome for the layman to understand. And one of our first objects should be to have a schedule so simplified and yet so perfected that its application could be made approximately by the property owner, and without trouble by the trained schedule rater.

When I returned from Europe I wrote Mr. Sylvester G. Williams, whose excellent paper on "Subrogation" you will remember some years ago, asking if he would prepare for us a paper on the subject of "Leasehold Interests," there having arisen many questions upon that at the time of the conflagration. Mr. Williams agreed to do so, but, unfortunately, by reason of bereavement in his family, he was obliged to leave home and could not write the paper. I brought up the subject to an attorney in this city recently, and he has just handed me this paper, which I will take the liberty of reading as a subject most interesting to most of you.

LEASEHOLD INTERESTS INSURANCE.

The subject of leasehold interests and insurance upon the same has proved to be of interest to underwriters, particularly in connection with the great fire of April, 1906. Some questions

were recently propounded to a member of the bar of this city and he has response thereto as follows:

There is no special or particular law governing insurance upon leasehold property, as distinguished from insurance upon any other class of property.

The general rule is that the destruction of a building terminates the lease, because that is the subject matter. If the lease were of the land and a building were erected thereon by the tenant, of course this rule would not apply. In every case the agreement of the parties, if there be one, will control.

Insurance upon a leasehold interest, the lessee occupying the building, is certainly not a wager policy. It may be that as the building belongs to the landlord, the latter will suffer the chief part of the loss, but the tenant may also suffer loss, and to that extent he is entitled to insurance. As to how improvements to a building made by the tenant should be insured, the answer will depend upon the circumstances of the case and the wishes of the parties. Both the landlord and the tenant may have interests to be separately insured; the tenant because he has the present occupation and use of the property; the landlord, because at the end of the term he will be entitled to possession of the property, and because meanwhile they add to the value of his estate. Of course, if the improvements be of the nature of trade fixtures or personal property belonging to the tenant, the landlord would have no interest to insure.

In response to the next question, as to insuring a building which is sublet by the lessee, it will not make much difference how the policy is worded. In case of a fire the amount which the lessee is entitled to recover is the difference between the amount which he would pay to his landlord and the amount which he would receive from his tenant. This is, as you say, the difference between the amounts of the respective rents paid and received.

In response to the question whether leasehold interests should be written at all, and if so, under what conditions and under what form, I would say that it is a question rather of business policy than of legal information whether leasehold interests should be insured. I would think that they should; sometimes they are very large value.

And I am of opinion that the form of insurance which seems to be generally used as to leasehold interests, including a provision for what you call "automatically running off" as time expires, is sufficiently satisfactory. This automatic provision

operates to reduce the face of the company's policy. Of course, the amount of insurable interest decreases whether the policy makes provision for it or not. In this, as in all cases, the measure of recovery of the insured is indemnity to the amount only of the actual loss sustained.

Your last question relates to insurance of rents, with a provision that the insured must at all times carry a certain fixed amount; otherwise he shall be a co-insurer, and in such case, whether the insured is entitled to recover gross rents, or only net income.

Strangely enough, this very question has recently been submitted to and determined by the Superior Court in a case in which the writer hereof was concerned. The aggregate gross rents of the building were \$68,000, and the policy required the insured to carry insurance at all times to that amount. A loss occurred, and the insured sought to recover the full amount of the loss. It was conceded, however, that the tenants were entitled to elevator service, janitor service and the like, the cost of which to the landlord amounted to \$10,000 per annum. All the insurance companies except one settled with the assured substantially in accordance with his claims. The Superior Court has decided in favor of the one company which held out, and has held that the insured is entitled to recover only the net amount of profit derived from the rents after allowing for the \$10,000 administration expenses. The case may go to the Supreme Court. I venture the prediction that the judgment will be affirmed. This may seem a hardship upon the insured because he was required by the insurance companies to carry insurance to the full amount of the gross rents; but the very foundation of the law of insurance is indemnity. Public policy forbids the making or enforcement of any contract of insurance under which the insured would derive a profit from the happening of the event insured against. There is an exception in the case of marine insurance where valued policies are permitted. In fire insurance the recovery is limited in all cases to the extent to which the insured has sustained loss by the fire. (Applause.)

The President: The serious part of this meeting appears to be over. The other side will now be presented to you. Mr. A. W. Thornton and another gentleman by the same name, but not related to him, are entitled to our gratitude for the work they have done. We will now listen to the reading of "The Knapsack," by Mr. A. W. Thornton. (Applause.)

California Knapsack

A. W. THORNTON Editors A. C. THORNTON

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No. 1

EDITORIAL.

Probably there is not a single member present who does not at this moment recall with admiration, esteem and regret the editor of the "Knapsack" for the past twenty years—Mr. Geo. F. Grant. In honor of, and deference to his memory, the "Knapsack" was omitted in the proceedings of 1907, and it was hoped that the assistant editor, who so ably contributed for a number of years, would be here to take charge of the "funny features" of the insurance business at the meeting in 1908. However, Mr. Niles has been advanced in the profession and has been drafted to New York, and this Association will miss his extremely clever, bright and witty contributions.

We cannot hope to emulate Mr. Grant or Mr. Niles, or to maintain the "Knapsack" on the high standard to which these gentlemen brought it: we can but do our best and ask for your indulgence.

If there be anything read in this thirty-second volume of the California "Knapsack" which may sound personal, let us assure you that the contributions are presented to you with the utmost of good feeling, and without the remotest intention of hurting the feelings of anyone. If names are mentioned, or members referred to, it is because we believe that those particular persons are such "jolly good fellows" that they will appreciate and take a joke in the spirit in which it is intended.

"Laff every time you pheel tickled and laff once in a while enny how'."

THE ADJUSTER.

He adjusted all the losses up and down along the coast
Never had a call-down letter from the office, not a roast;
But it must be that their confidence was dreadfully misplaced,
He could not adjust the buttons down the back of his wife's waist.

CAREFUL SELECTION.

This is contributed by a Deputy Assistant Secretary of San Francisco:

"When I ran a newspaper in Snohomish, before entering upon my brilliant and successful career in the insurance business, I gave the following instructions to my city editor, assistant city editor, country editor, sporting editor and reporters:

"All young brides are blushing, beautiful and accomplished; old ones and widows are amiable and cultured.

"Merchants who advertise with us are wide-awake, and a credit to the town—the names of non-advertisers must not appear in this paper.

"Old lawyers are learned and merit a seat on the supreme bench; young lawyers are silvery-tongued and promising.

"Doctors are eminent; farmers are intelligent.

"Insurance men are robbers, pickpockets and thieves!"

ANOTHER ON THE IRISH.

An insurance man of Hibernian extraction, who is noted for his ability to tell a good story, recently weaned himself temporarily from the leather-covered chair in the back office to visit his agents in the Northwest. While standing on the dock at Seattle (where the health officers are trying to keep out San Francisco rats) he became deeply interested in a discussion with a friend on the different species of the canine race, collies, setters, spaniels, terriers, etc. A steamer warped into dock and as the lines were made fast the captain inquired in stentorian tones:

"Quartermaster, where is that rat-catcher?"

The insurance man was caught off his guard and the laugh was on him as he hollered out "Here I am!"

'Twas the morning after the Special Agents' Association meeting at Portland, recently. One of the older members met a young man who was not feeling up to the standard, and accosted him as follows:

"Say, my dear boy, you can't ever get ahead so long as you dissipate so."

"Can't, eh? Can't get a head? I'd like to know how in thunder I got this one?"

The lack of co-insurance clause
Destroys each "A" class risk
And places on its early grave
A nice tall obelisk.

NOTES FROM AN AGENT'S REGISTER.

The specials who travel through Washington will recall a local agent who suffered for years with an incurable disease. When not suffering from his malady he was a prince in every sense of the word; but while enduring almost intolerable agony his temper was at times short. He is gone to his eternal reward, and it is not by any means in a spirit of criticism that the writer quotes a few extracts from his policy register, which has now passed into other hands. His notes were profuse, and nearly every entry had some running comment.

"Cancelled flat. The assured is a Missourian. Let 'er go."

"Cancelled like a house afire. That's all."

"Cancelled—too much insurance."

"Letter from general agent. He wants daily reports written in ink instead of indelible pencil. Notice he signs his letters in indelible. He's getting d—— particular."

"Cancelled P. R. R. P. \$13.00, but new policy rewritten for unexpired term. So 'even Stephen' and no one hurt."

"Policy ordered cancelled by general agent. This is a statistical order, so common sense is thrown to the winds."

"This register is rapidly becoming a policy graveyard, otherwise a cancellation depot. What t'ell, Bill!"

CLAUSES COMPLICATED.

A man in Idaho erected a splendid sawmill plant; the agent insured it, and the daily was "tagged" for the three-fourths clause, as that clause is compulsory in Idaho. The sawmill, planing mill, dry kiln and platforms were insured under one item, so it was also tagged for the average clause. The agent dutifully attached both.

Later the plant was sprinklered, and the reduction in rate carried with it the 70 per cent co-insurance clause, which was also attached to the policies. During the recent depression the mill was temporarily shut down and permission was sought from the agent. He attached the shut-down permit, which carried with it the suspension of one-fourth of the policy during such vacancy. The assured read the stock of endorsements and clauses on his policies and wondered where he was at. He asked the agent. The agent wrote the managers—among them the "Colonel" and "Uncle Bill," and, as usual, they didn't agree. A letter was sent the agent reading about this way: "Our new special agent, who has now been on the road for six months and knows the business thoroughly, will be in your town next week. Submit the matter to him; he'll fix it."

San Francisco, Cal., May 11, 1907.

Hon. J. H. Schively, Deputy Insurance Commissioner, Olympia,
Wash.:

Dear Sir—We herewith return to you Agent's License No. 4813, with the statement that this is not our fault, as these Washington agents seem to have a way of starting in business, selling out to their brother-in-law, and then going back into business again. This firm was Smith & Brown, then Mr. White showed in the horizon and Smith retired; then Brown showed up and drew a pair, so Smith & White faded. In other words, can you issue a license to Mr. R. F. Brown in lieu of this license and charge it up to "pleasure"? If not, we will dig down and come up with a two-spot. We think it the duty of the Deputy Insurance Commissioner to see that the agents in the State of Washington behave themselves and cause us less trouble.

With kind regards, we are, very respectfully yours,

EDWARD BROWN & SONS.

A. W.—In sending you this characteristic letter, I might add that there have been two changes in this agency since date of this letter.

J. H. S.

A NAUGHTY-SIX EPISODE.

'Twas a small, shabby house in the old part of town,
The gate off its hinges, the fence broken down;
The roof was sway-backed and the windows gaped wide
To show how the simple life flourished inside.
The floors were uncovered, the stained walls were bare,
And not more than three legs had any one chair;
A broken-down stove and a bed and a comb
Were the treasures of those who had called the place home.

The policy holder, with tears in his eyes,
His feelings of joy sought in vain to disguise
As he wrote down his losses: Mahogany chairs,
A Steinway piano, a bust on the stairs
Of Parian marble, rugs out of the East,
The smallest one worth a cool thousand, at least;
Fine china, a service of silver, cut glass,
And paintings that beggar the art world, alas!

And the company, wearily, patiently paid;
But up in the star-world the sorrowful shade
Of old Ananias observed with a sigh,
"He beats us, Sapphira; we thought we could lie."

A SAN FRANCISCO ADJUSTMENT.

An Eastern adjuster (for we must tell all the mean things on our brothers from the East) inquired why the assured had not saved a considerable portion of his valuable furniture during the 18th and 19th of April, as his house had not burned until the evening of the 19th. The claimant replied that he had moved nearly everything out of the house, but the fire spread and destroyed what he thought he had saved. "But," said the adjuster, "we insured your furniture in the building described in the policy, and when it burned there was no furniture in it." "Hold on," returned the assured, "the policy says that in case of removal I am protected for five days." "Right you are," retorted the adjuster, "provided the property is removed to a **place of safety**. You see, you did not move the stuff to a place of safety; if you had we would have had no loss." Result: A compromise.

The special agents of the Northwest have gained the reputation of being up to more than the average in their line, but one in particular is looked upon as the leader.

Recently this personage was the subject of discussion by two fellow specials, when one asked the question.

"How is it that he has such a reputation for wisdom, when he seldom says anything?"

"That's just it; the boys think he knows too much to talk about."

The following correspondence recently passed between a manager and his special agent:

Sam Jones, Esq., Special Agent, Bigtown, Oregon:

Dear Sir—We are in receipt of daily report for policy No. 27680, favor of Northern Cigar Company, covering on stock of cigars and tobacco while contained in brick building situate on southeast corner of Mill and Market streets, Pluvius, Ore.

In looking up same on Sanborn map we note that the building is occupied by the Pacific Laundry, and we are at a loss to comprehend why the assured should send their cigars to a laundry unless it is to have the wrappers washed. Yours truly,

JOHN SAMPSON, Manager.

John Sampson, Esq., Manager, San Francisco, Cal.:

Dear Sir—Your letter of recent date in re daily report of policy No. 27680, Northern Cigar Company, has had my careful attention. The building in which stock is contained is occupied

by the Pacific Laundry, as shown on Sanborn map, but the Northern Cigar Company has fitted up a room in one corner in which they conduct a retail cigar store.

When I called at the laundry to make an inspection of the risk, I met a charming young lady named Pearline, and was referred by her to the manager, who is a man without polish and who seemed to have such a bundle aboard that I could detect quite a list. He informed me that the wrappers would be washed, as you surmised, but they positively would not be mangled. I told him his statement savored of soft soap, or a lye, whereupon he soaked me. This slight diversion on his part took the starch out of me, and I fancied I could see my domestic finish; I tried to put on a stiff front, but I was done up.

I have requested our agent to drop the line at expiration, as I am convinced that the company will lose a tub of gold dust if we pin our faith to such risks, and if the foregoing irony will wash down, you will no doubt approve my action. In conclusion I beg to suggest that you refer the entire matter to the Board. Yours truly,

SAM JONES, Special Agent.

IKEY'S CHRISTMAS EVE.

'Twas the night before burning, when all round the shop
Not a mortal was stirring, not even the cop;
When next to the naphtha the candle was placed
In hopes of a burning without any "vaste."

Old Ikey, asleep in his second-hand cot,
Was dreaming of fires "vot vould burn goot und hot:"
He promised his kinder when money he got
He'd give them a nickel to put in the slot.

When out in the alley was raised such a clatter
Old Ikey yelled out "Mein Gott, what's the matter?"
He slipped on the limburger and spilled the sauer kraut,
Then rushed to the window and stuck his head out.

"Ach Rosey! Ach Kinder! Come skibbing here quicg:
Dot hose gart has blayed me von dirty damn trieg;
I ordered some vire vorks to make the night bright,
And dey gomes und blows oud the virst leetle light.

"Insted uv de ashes I ordered for you,
Dey have smoked ub the cloding und vet id all thru."
Poor Ikey he felt as if life was a fake
When flame from a candle on naphtha won't take.

You could see the old man, he was terribly hurt
 As he wiped away tears with the tail of his shirt;
 Then out from the street came a terrible roar
 And a big husky voice yelled "Now open the door."

Old Ikey was scared of the terrible din,
 So he just sat and shivered till the door was broke in;
 Then up stairs there came a great big Irish mug
 Who grabbed poor old Ikey to go to the jug.

Said Ikey, so cold that his round little belly
 It shook when he talked like a bowl full of jelly:
 "Good-bye liddle kinder; dear Rosey, farewell;
 I leave you de bizness—id von't go to h—l;
 Und ven I come oud I vill make id all right,
 Merry Gridzmas to all, und to all a goot night."

IF (A PARODY).

By A. M. Riley.

If I were fire, I'd seek the Mutual risk
 And warm it till it blossomed bright and brisk.
 And the sweetness of its smiling mien
 Resemble some red-hot volcanic scene;
 And when another Mutual came I'd seek
 And find its chief mogul, and make him meek.
 And do my small but most efficient part
 To chill the very cockles of his heart.

If I were wind, I'd turn my breath upon
 The hide-bound Legislature, till anon,
 The grand stand craft on which it sailed should find
 Our harbor blest, toward which 'tis not inclined;
 And when in the statesman's foolish brain
 I'd found the faintest glimmer, I would fain
 To blow until he'd cast his anchor there
 And painted on his ship, MUTUALS BEWARE!

If I were water, it would be my whim
 To seek out all earth's desert places grim,
 And turn each arid acre to a fair
 Lush home of flowers and oasis rare;
 That in the world's Saharas there might grow
 Cities and towns that premiums would bestow
 On companies honest, fair and square,
 Giving to each its just and lawful share.

If I were gold, I'd seek the agent's purse,
 So that he'd never need to know reverse,
 Or take a risk that should be marked K. O.
 Because he had to have the money so.
 If I were gold, I'd give the banks their share,
 That they would never need to have a care,
 Except to see that we were all content
 And did not need observe financial Lent.

A special agent borrowed a "ten-spot" from a friend—another special—in a moment of financial embarrassment, and on returning the ten next day he was handed these facetious verses:

WHEN JOHN BORROWED TEN.

While deep engaged in business cares
The smell of Rye blew up the stairs,
And soon there staggered into sight
My old friend John, with face alight.

In rum-soaked tones he softly spoke:
"Oh, Ab, my dear, I'm drunk, I'm broke,
And lest I sober up again,
Do, pray, be kind and loan me Ten."

"To always keep half-shot I try;
I must have booze, or else I die;
For booze to me is food and drink—
Oh, help me, Cassius, ere I sink!"

I couldn't very well refuse,
And cut off his supply of booze,
And so I kissed the Ten adieu
And Johnny zigzagged out of view.

And then I softly murmured "Hell!"
And charged up Ten to P. and L.;
Expenses are not what one spends,
But what one loans to drunken friends.

Of all sad words of tongue or pen,
The saddest are: "I loaned John Ten."



A. W. T.

The remains of A. W. T.
Lie deep beneath this rock;
Drunken Johnny paid the Ten,
Ab couldn't stand the shock.

THE POW-WOW AND THE POTLATCH.

(A la Hiawatha.)

A. W. T.

If you ask me whence these stories,
Whence these weird and idle fancies,
Whence they came unto my knowledge,
I would answer, I would tell you
From the land of the Puyallups,
From the tribes of the Nisquallys,
From the wigwams of Seattles,
From the tepees of Tacomas,
From the Spokanes and the Portlands,
From the San Francisco warriors
And the tribes of all the nations.

When the spirit of the Indians
Called the Chieftains all together
To deliberate in council,
To convene in annual pow-wow;
When the warriors assembled
In the City of the Earthquake
Where the temblor shook the wigwams,
Shook the tepees and then burned them:

When they met in San Francisco,
Smoked the calumet, the peace-pipe,
Drank the booze, the fire-water,
Then they told of deeds of daring,
Told of deeds of "nerve" and valor,
Sang the war-songs of the mighty,
Sang of hunting for the wampum.
There was told me all these stories,
When I listened to the pow-wow
Of the redskins there assembled,
And I tell them as I heard them.
Spoke the mighty Chieftain Arthur
Who presided at the council—
For the space of two suns acted
As the leader of the meeting—
"I have traveled to the far-land,
To the tribes of Scandinavia,
To the Swedes, the Danes, the Norskmén,
To the land where I get wampum
For my klutchman and papposes."

"So I know the braves assembled
Will with admiration view me
As the greatest, bravest chieftain
That has ever dwelt among you."

"None have ever acted better,
None have shown the learning, wisdom,
None can therefore better merit
Your esteem and admiration."

But the braves had other notions,
For they chose another warrior
To preside at the next pow-wow
To be held in San Francisco;
Chose a Tillicum, a Chieftain,
Chose a man of big dimensions,
Who had journeyed on the warpath
In the land of the Seattles.

Thus he spoke to those assembled,
Spoke in accents slightly foreign,
Spoke in Hieland Gaelic accents,
Like the gurgling of the "Dewar"
Fire-water he had punished:
"I have hunted, I have traveled,
I have gone upon the warpath
With the skookum braves—the Specials—
'Mongst the tribes of Northern countries.

"Once I built my modest tepee
In the village of Snohomish
On the banks of the Skykomish,
Dirty, murky, muddy waters;
There I ran a little paper—
A 'newspaper' I did call it
(Call it what you will, 'twas rotten);
Then, an unknown, simple warrior,
Now, a mighty chief among you—
Not a small or weak or poor one,
But a strong, a mighty big 'GUNN.'
"And I'll give you words of council,
Words of wisdom and of learning
When we meet in our next pow-wow—
If there's not another earthquake
That will change the face of nature
Or destroy another city."

Our good Tillicum, Chief William

(Uncle Bill, the young braves called him).
 Told the young men many stories,
 Many happy, pleasant stories,
 Mixed with excellent experience;
 Told of venture and of peril
 'Mongst the tribes of Umatillas.
 The Nez Perces and the Modocs.

"Braves are born, not made," quoth William.
 "Braves that pay out much of wampum
 When the tepees and the wigwams
 Are consumed by conflagrations."
 "Chiefs that figure on a shingle,
 Make their reckonings on a barn-door
 With a short and stubby pencil,
 Beat the graduates of Carlisle.
 Skin the men of erudition
 Who compute their calculations
 With equations algebraic."

Papa Gerould rose before us,
 Pulled his white and hoary scalp-lock,
 Wiped the juice from off his whiskers.
 Took a blow at his proboscis:
 "Many, many moons I've hunted
 With the skookum and the cultus,
 With the young braves and the old ones
 Since I traveled for the **Anglo**."

Not another word he uttered,
 Lachrymose and sad his tones were,
 And the young braves felt despondent
 As they listened to his wand'rings.
 Listened to his recollections.

Then, in all his paint and feathers,
 With the scars of many battles,
 Rose the Chief of the Odab-ja
 Rose the pompous warrior Fab-j;
 Swelled his chest out with ambition,
 Pulled his scant lock, pursed his lips out,
 Burst a button from his waist-coat,—

"I've adjusted (rather, settled)
 Many a claim throughout our tribeland;
 Many a forked-tongued, lying warrior
 Tried to get our wampum from me;
 But I kill them, skin them, flay them.

With a bludgeon I belay them.
 Now a rule I use upon them
 That is simple and effective
 And is like an anaesthetic;
 I apply the rule of Kinne
 And they know not what has happened
 'Till the loss is paid and settled."

"I've prepared a heap big potlatch,"
 Said the peaceful Chieftain Spencer,
 "At the Wigwam of the Fairmont,
 At the largest of our tepees;
 There we'll eat and drink in plenty
 At the closing of our council;"

"Braid your scalp locks, wear your war paint,
 Don your blankets and your feathers,
 Come bedecked in all your finery,
 Come to eat, to drink, make merry."

At the potlatch, at the pow-wow
 All the braves came dressed in war-paint.
 All the Chieftains, all the warriors
 In their blankets, beads and feathers;
 Feasted on the deer, the venison,
 The wild duck and the partridge,
 Drank the bubbling fire-water,
 Drank and drank and drank more of it;
 Whooped and hollered, shouted war-cries,
 Danced the war-dance of the Indians.

What a difference in the morning!
 When their scalp locks pulled and tortured,
 When their eyes were dull and heavy,
 When the taste was on their palates
 Like the birds' nest of last summer.
 Then for home they started sadly,
 There to hunt another season,
 There to chase again the wampum,
 There to cogitate with pleasure
 On the good time had in 'Frisco;
 There to dream of next year's council,
 Next year's pow-wow, next year's potlatch!



December 14, 1907.

My Dear Colonel:

Special Agent Blank has notified us, by registered letter, that you are sending in a **new dwelling house line**. Dear Colonel, this is too good to be true. Mother-of-Pearl and Father Time, we could not hope for such good things. He stated he wanted us to write you a letter on receipt of the daily report, acknowledging it, and to ask you to favor us with a goodly amount of new business during the coming year.

In the first place, we are too nervous to wait for the receipt of said daily report; we have got to explode and raise a loud noise before the daily reaches us. And, in the second place, we absolutely refuse to ask you for any new business during the coming year; it is preposterous! All first-class agents, who appreciate good offices, good Companies, etc., increase their business each year for said office. Special Agent Blank was mistaken, he hasn't got the "sabe;" he doesn't know how to handle you. The writer would like to make him a bet that if he was to "hit the pike" and land in this charming suburb of Piketown (where nobody winds their watches for fear of making a noise, and at the same time it is not necessary because everyone is asleep, therefore, cannot wind their watches while they are asleep); that he could sell our good-looking and prosperous agent a bunch of stock in the California Safe Deposit, and on second visit, he could go to him and tell him just how much business he wanted. This idea of getting a third party to intervene in our behalf does not, as we said before, strike us favorably.

Just think, Colonel, if that new dwelling house line didn't arrive, what would become of us! Think of the heart-broken look of despair and the down-trodden expression the writer would have on his beautiful countenance when going home to his wife, but instead he goes home to-day with a cheerful expression, happy and full of smiles and says to his wife, "The Colonel has woke up, has wound his watch and is sending in a new dwelling house line." Be careful, dear Colonel, when you wind your watch you are not arrested for disturbing the peace. Everyone in Piketown will be awakened.

Yours very truly,

LETTER FROM JAPANESE POLICYHOLDER.

San Francisco, May 28th, 1907.

Blank Insurance Co., San Francisco—

Gentlemen: Please allow me to make the inquiry if you will allow me to have the share and the dividend of your company, receivable from you without surrendering my policy to you in such unusual case as it is lost or some other equivalent circumstance, as it may be occurred. If so, kindly instruct me how can I get out of the inconvenience on which I am standing now and at the same time to clean up the obligation. My policy number is 344369.

Thanking in advance for your kind and early reply, I beg to remain,

Yours very truly,

NOGI TOGO.

 Fruitvale P. O., May 13, 1906.

Blank Insurance Co.—

Dear Sir: I wrote you twice and have got no answer. My wife has called and I consider we have a poor ans.

I have paid you my money promptly for 12 years on \$300, and it cost \$600 then. I was just after paying in full on a piano, which costs more than my insurance calls for and \$1000 would not cover my loss and other losses nothing will cover. And your agent is bringing up the earthquake loss. I lost a fancy dish and two bottles of pickles and you can see what I saved if you want right here in Fruitvale (two bundles of clothes).

My wife and babies are here in Fruitvale and I want to get started again and it is about time you would show your hand. Another thing, why dont you get over to the city where you belong. Trusting you will let me if and when you will pay.

I am Respt.,

(Signed) _____

No. of pol. 4576585.

1271 Main Street.

ENCYCLOPOEDIA THORNTONICA.

(Underwriters' Edition.)

AGENT—A tiller of the soil. One who produces. A provider of revenues for management expenses and special's luxuries and comforts. A trivial but pleasant incident to the business.

ACCOUNT—A juggling of figures, purely mathematical. See credit rule.

APPRAISAL—A decision of two out of three arbitrators soaking the companies. Usually resorted to in smoke damages.

ADJUSTER—"Born, not made." (Sexton). A dispenser of the companies' assets. A wise old owl who does not know much and is wise enough to hide it.

ASSURED—The real candy kid who keeps all of us out of the poor-house. A good thing!

BILLION—An amount claimed by every special agent to have been paid out by his company in the San Francisco fire, in full without cash discount.

BOARD OF DIRECTORS—A coterie of mathematical specialists who extract Managers without pain (to themselves).

BROKER—A fifth wheel to the business.

CLAUSE—The joker in the deck introduced by the broker; beats the little and big casino.

CONDITION—After the banquet; "what a difference in the morning."

COMMISSION—That part of the premium which is divided between the assured, the broker and the agent.

CONFLAGRATIONS—Pyrotechnic displays with assessments and failures as concomitants.

CONTINGENT—Velvet for the boss.

CONTRACT—An agreement binding on the companies only.

CLERK—One who enjoys the privilege of being charged with the mistakes of the manager.

DELINQUENT—A disease, sometimes chronic but not contagious. Caused by getting 15 per cent. hand in 85 per cent. pocket.

"DOLLAR FOR DOLLAR"—A general term now applied to all companies that were interested in the S. F. conflagration.

EARTHQUAKE—A terrestrial disturbance materially altering the financial condition of the underwriting world; known to have occurred in Jamaica, Valparaiso, Japan and other foreign countries.

EXPIRATIONS—Property of the agents.

EXPERIENCE—Property of the companies.

EXPENSE—Velvet for the special agent. Not otherwise essential to the business.

EXCESS—A compensation to the agent for the company's small assets, poor management or unsatisfactory settlements.

EXAMINER—An individual occupying a position similar to the "look-out" in a faro game. He is not supposed to overlook any bets.

FAILURES—Mutual companies.

FIELD—A garden patch cultivated by special agents, where weeds and fruit grow "side by each."

GASOLINE—Filler for hand-grenades.

GRAND JURY—Expert underwriters and adjusters.

GENERAL AGENT—A bunch of avoirdupois with a rotary-seat action, oscillating between a stenographer and a poor signature.

HELL!—The loss ratio which extinguishes the manager's contingent. General conflagrations, more especially the blaze in San Francisco in 1906.

HEAVEN—Has nothing to do with fire business.

INSURANCE—Not an article of commerce or commodity. Fattening to some but not good to eat. See games of chance.

INCENDIARISM—Result of an hypnotic influence superinduced by intently gazing upon two objects of magnitude in inverse ratio,—e. g., large insurance and small value.

INSPECTOR—An individual possessing superior knowledge and generally underpaid.

INDEPENDENT ADJUSTER—Not an underwriter. See especial agent.

JOKES—See California Knapsack.

JOLLY—Glad hand, hot air and bull-con peddled to the local agent in exchange for new risks.

JURIES—Our friends! NIT!

JUNK—Undesirable insurance. See mutuals.

KINNE RULE—A rule in non-concurrent apportionments accepted invariably by companies having specific policies and repudiated by the same companies when their policies cover in blanket form. See Griswold.

LAMEDUCK—A local agent with a large family and a small business.

LINE—That on which companies hang their experience.

LOSS—An advertising medium for the furtherance of our business. A ready sale for cash.

MANAGER—

NET—Not seines or hair receptacles for ladies. Very often in our business spelt with an "i."

OPEN FILE—A receptacle for hidden treasures, principally unapproved tags.

OFFICE—The Manager's roosting place, which the special agent is occasionally permitted to visit and where he receives the glad hand and the glassy eye.

OPINIONS—An insurance man's ideas compiled in legal lore by able attorneys in exchange for portions of the company's assets. Legal guesses, generally poor.

POLICY—A lottery ticket, no blanks. A demand note payable in case of loss. Has no relation to "contract."

PREMIUMS—The milk in the cocoanut.

PRESIDENT—A depository of legal lore who never shows signs of seepage.

QUESTIONS—The extravagant use of printers' ink on the back of daily reports. Means to conceal what the agent really knows about the risk.

QUAKE—Antiquated and obsolete term, known only to Eastern adjusters.

RATE—A good or a bad guess. What the public kick about.

REBATE—See marine and life insurance. Not applicable to the fire business.

RULE—A handicap for our competitor.

SPECIAL AGENT—IT! the real thing! A small, indestructible, elastic molecule, compressed by the board of directors, depressed by the manager, impressed by his own importance and suppressed by the local agent.

SURVEYOR—An individual hired for the purpose of being cussed and damned. Raise his salary.

"SIX" BITTERS—Angustora, Lashes', Hostetters, Bonecamp, Orange and P-p-peruna.

SUNDRIES—Shoes and stockings for the special's kids.

SCIENCE—This applies to removing the kidney from one cat to another. Has no place in our vocabulary.

SUPERINTENDENT OF AGENCIES—A special agent in disguise.

TAXES—Derived from "takes;" what the State takes from the companies for the maintenance of party supporters. A good joke, as the other fellow pays them!

TERM—What some in the business ought to get, but don't.

TRUST—A word coined in Kansas. Nothing to it.

TELEGRAMS—A charge to cover 5 per cent excess commission.

UNION—Trademark for overalls, etc. A gentlemen's agreement binding on the other fellow.

UNDERWRITERS—Managers with fat salaries. All others are simple insurance men.

VALUED POLICY LAW—Legalized theft. See gambling.

VACATION—A trip to Europe for the boss; three months in the mountains for the assistant; hard work for the special; nothing for the local.

WIRES—A Marconi system of having rates reduced and rules suspended; unknown to some offices and thoroughly perfected by others.

WELCHERS—An obsolete, prehistoric pseudonym opprobriously applied by newspapers to a few companies during an ancient conflagration. None now extant.

WHITNEY—Author of the formula that "the Nth. power of 'O' in algebraic progression is the primal and basic factor in computing coinsurance and conflagration differentials."

X—A has-been; an independent adjuster.

'XTRAS—Charges in Specials' accounts to cover concessions to local agents.

YELLOW KID—An excuse for multiple agencies. See Underwriters annexes.

YESTERDAY—The day before the San Francisco conflagration!

ZERO—See manager.

The President: We will now listen to the report of the Committee on Nomination of Officers, and then indulge in the election of officers before we close our meeting for the afternoon. There are also two other committees to report, and perhaps before the election of officers we will listen first to the report of the Committee on Recommendations in the President's Address.

REPORT OF THE COMMITTEE ON THE PRESIDENT'S ADDRESS AND ON THE REPORTS OF THE TREASURER AND EXECUTIVE COMMITTEE.

Your Committee has carefully considered the material referred to it, and begs leave to report as follows:

Segregating the items of the Treasurer's report, it appears

that the receipts from donations, etc., amounted to \$305, and the disbursements for printing the proceedings of 1906 to \$200.10, so that the disbursements of ordinary character exceeded the ordinary receipts by \$31.49. While the Association was about self-supporting, according to this, the Secretary waived the salary of \$150 allowed him by the constitution, in favor of the Librarian. This emphasizes the loyal record of the Secretary for over ten years; but it should not be expected of any member that he serve without compensation, and yet carry the burden in the collection of dues, etc., to which attention has been called in the report of the Executive Committee. We recommend that the latter committee try to find a way to preserve the efficiency of the library without making necessary this sacrifice by the Secretary, of proper recognition for his services.

We congratulate the Association upon the rehabilitation of the library, which has been due more to the experience, industry and interest on the part of the Librarian than to the sums contributed and expended. The work of two years since the conflagration has almost equalled the record of the fifteen years which preceded it.

Inasmuch as the funds of the Insurance Institute have been kept separately, and there is a credit balance of \$125.55, it is suggested, if the Institute be revived in 1908, that some of this could be expended profitably to present practical illustrations or experiments at some of the lectures, or by engaging the assistance of experts, not in the insurance business, during the lecture course. The Institute will be self-supporting, with a fee of \$2.50 per member; and some part of this might be appropriated annually for the library, the use of which is included in the fee. The appropriation could be agreed upon between the Executive and Institute Committees. The President has drawn attention to the important differences between building construction in Europe and America, concerning which very little information is available in this country. It would be worth while to procure for the library some of the works published abroad, and copies of building laws, etc., of later date than those published by the United States Government in the Consular Reports of 1892.

The Treasurer should be relieved of embarrassment in the collection of dues, and we recommend that the Executive Committee call for a list of delinquents, one month before the Annual Meeting; and that, after written notice to each delinquent member of such intention, the Executive Committee report at the opening session of the Annual Meeting the names of members

then delinquent, with the recommendation that their names be dropped from the roll, and that they be declared ineligible for attendance at the annual dinner. Also, that the Executive Committee consider the expediency of the adoption by the Association of the rule that any person who has been eligible for membership for more than one year prior to an Annual Meeting, and has failed to apply for such membership, shall not be entitled to an invitation to the dinner through another member, in view of the fact that the actual cost thereof has exceeded the receipts for several years past. A person who can, and will not, contribute to the support of this Association should scarcely enjoy this privilege at less than cost. As an alternative, the price of the dinner might be made \$7.50 for non-members. We commend the suggestion that our membership be increased, and urge every member to endeavor to interest his friends among special agents who have not so far joined the Association.

We recommend that the by-laws in such form as they now exist be carefully revised by the Executive Committee, and, after approval by them, be printed.

We heartily endorse the recommendation that the sessions of the Insurance Institute be resumed. The changes in the personnel of the San Francisco offices in three years have been so great that an elementary course, like the first one, might well be presented, leaving the more thorough and detailed treatment of the different subjects for consideration in after years, as outlined in the report of the committee in 1906. As far as practicable the members of the Institute Committee should be residents of San Francisco.

This Committee is not prepared to express a final opinion upon the proposal to amalgamate the Fire, Marine and Life Insurance Associations in San Francisco. The Institutes abroad are usually of this character, but the offices connected with them transact fire and life, or fire and marine insurance, and sometimes all three. Community of interest might readily be found in a good library, especially in the department of insurance law, and in this direction co-operation might mean economy. The effect of going beyond this, so as to include other subjects than fire insurance in our annual program, would have to be carefully considered, and we think our banquets are already large enough. We recommend that the Executive Committee take up this matter early in the year, limiting the discussion with committees from other associations to library work at the outset.

We commend the suggestion by the President that members

should be made familiar with papers prepared by eminent writers in the East and abroad. The expense of putting pamphlets containing such papers into the hands of our members would be beyond our means; but we repeat the recommendation made some years ago, that correspondence be entered into with Eastern associations looking to the joint publication annually of selected papers by writers of experience, after the plan followed by the Federation of Insurance Institutes of Great Britain and Ireland. Such an invitation could be extended to the Fire Underwriters' Association of the Northwest, the Insurance Society of New York, the Insurance Society of Philadelphia and others of like character. Each association should be represented in the pamphlet by at least one paper annually, selected from any of its printed proceedings; and if the papers reprinted were not more than ten in number, the expense would be moderate. If well done, it is likely that the pamphlets could be sold readily to younger members who could not hope to obtain all the original reports and proceedings represented. There would be no impropriety, for example, in reprinting some of the addresses on topics affecting our business delivered before the Associations of Fire Engineers and Electrical Engineers, the American Water Works Association, and the valuable papers prepared for the Fire Protection Association, assuming that these would grant the necessary permission. Doubtless, also, original papers of value could be invited and secured for such a publication, which would be national in character.

Respectfully submitted,

HERBERT FOLGER,

F. B. KELLAM,

J. L. FULLER,

Committee.

The President: You have heard the report of the committee. What is your pleasure?

Mr. Kinne: I move its adoption.

The motion was seconded and duly carried.

The President: We will now listen to the report of the committee of which Colonel Kinne is chairman, on the nomination of officers.

Mr. Kinne: Mr. President, I think it may be well for me, before reading the report, to state to the members of the Association, as we all listened with so much interest to the reading

of Mr. Weed's paper yesterday, and just as a matter of information so that it will be published, that Mr. Joshua P. Haven and Mr. Charles D. Haven are in no sense of the word related. I might add also that forty-nine years ago I used to run down from Brenham place and hook on to the old Monumental, "Big Six," as we called her, and I thought I was doing good work when I helped pump the water into the machine to put out the fire. I am almost ashamed to say it, because I look so young, and to have you know that I was a hard-working young man in this city fifty years ago, helping to put out fires, but I am compelled to say it, because I am always truthful and always try to be honest—and Mr. Weed's reminiscences in his paper brought the subject to my mind.

In view of the limited time afforded your committee, we find ourselves unable to nominate a candidate for the office of Vice President of the Association.

It has been impossible to canvass the situation or to obtain the consent of such members as the committee considered eligible for this important office, and we respectfully suggest that nominations be made by members on the floor, as has been the custom heretofore.

In this connection your committee would recommend the following substitute for the resolution adopted yesterday, viz.:

"It shall be the duty of the President on or before sixty days prior to each annual session to appoint a committee consisting of five Past Presidents to nominate the officers and the Executive Committee for the ensuing year; said committee to report to the Secretary of the Association thirty days prior to the annual meeting, and the names of such nominees to be published in a circular and mailed to each member."

C. MASON KINNE,
WM. H. LOWDEN,
LOUIS WEINMANN,
A. W. THORNTON,
V. C. DRIFFIELD,

Committee.

Your committee appointed to nominate officers and Executive Committee begs to present the following:

For President—Mr. John W. Gunn.

For Members of the Executive Committee—Messrs. A. M. Brown, John W. Gunn, Frank J. Devlin, R. W. Osborn, J. L. Fuller.

For Secretary and Treasurer—Calvert Meade.

For Assistant Secretary and Librarian—J. P. Moore.

In this connection I might add that your committee had a very good session, we were all present, and we consumed much of our valuable time in doing what we thought was right in the way of making a report, which deprived us from listening to two or three of your papers. We are unanimous in making this recommendation, and we believe that the substitute is entirely in order and can be acted upon at this meeting, and not put over for another year. It is germane to the resolution of amendment that was adopted yesterday morning, and as anything that is entirely proper within the rules can be done at the annual meeting, we make this recommendation with the hope that it will be acted upon at this meeting, and not have to be deferred for a year. There are two parts to the report. The first contains the nominations that we make for officers, which we trust will be approved by the Association, and then the door will be wide open for nominations for Vice President.

Mr. Thornton: I move that the rules be suspended, and that the amendment be adopted in the place and stead of the one heretofore adopted by the Association at this session.

The motion was duly seconded and the amendment unanimously adopted.

Mr. Kinne: The committee thinks it proper to make this report, and they now place in nomination as the President of the Association for the ensuing year Mr. John W. Gunn.

The President: You have heard the nomination of Mr. Gunn, gentlemen. Are there any other nominations? If not, the chair will entertain a motion to declare the nominations closed.

Mr. Driffield: I move that the nominations be closed, and that the Secretary be instructed to cast the ballot of the Association for Mr. John W. Gunn as President of the Association.

Both motions were seconded and unanimously passed, whereupon the Secretary cast the ballot of the Association for Mr. Gunn, and the President declared him the duly elected President of the Association for the ensuing year.

The President: Gentlemen, nominations for the office of Vice President are now in order.

Mr. Osborn: Mr. President, I take pleasure in nominating and placing before the Association to-day the name of a gentleman who has been identified with the Association for some time, written some papers, whom I know to be well qualified for this position, one whom I know will take a great interest in the Association, and, if elected to the honorable position, will feel the honor conferred upon him, and will give rare gifts to the discharge of his duties. It is unnecessary to go into detail regarding the man's qualifications, because I think most of the members, here, if not all of them, know him well. I therefore simply place him in nomination, gentlemen, by giving to you his name—Mr. Adam Gilliland of the Hartford Fire Insurance Company.

Mr. Weinmann: I desire to second the nomination, Mr. President, as a most excellent one.

The President: Are there any other nominations for the office of Vice President? If not, the chair will entertain a motion that the nominations be closed.

Mr. Thornton: I move, Mr. President, that the nominations be closed, and that the Secretary be instructed to cast the ballot of the Association for Mr. Gilliland as Vice President.

The motion was duly seconded, both motions carried, and the Secretary was instructed to cast the ballot of the Association for Mr. Gilliland, which instruction was carried out by the Secretary, and the President announced that Mr. Adam Gilliland was the duly elected Vice President of the Association for the ensuing year.

The President: We will next have nominations for members of the Executive Committee.

Mr. Kinne: The rules of our Association require, Mr. President, that the members of the Executive Committee shall be Past Presidents, other than those who are ex-officio members, namely, the retiring President and the incoming President. Your committee has therefore named, as already read to you, as such Executive Committee entire, Mr. A. M. Brown, Mr. John W. Gunn, Mr. Frank J. Devlin, Mr. Russell W. Osborn and Mr. J. L. Fuller, and I move that the nominations for members of the Executive Committee do close, and that the Secretary be instructed to cast the ballot of the Association for those gentlemen as members of the Executive Committee.

Mr. Weinmann: I second the nominations and as well the motion to close the nominations and instruct the Secretary.

The motions both carried, the Secretary cast the ballot of the Association for the gentlemen named, and the President declared them the duly elected Executive Committee of the Association for the ensuing year.

The President: The only other officers to be elected at this time are a Secretary and Treasurer, which we have been accustomed to have held by one man. You have heard the recommendation of the Nominating Committee. What is your pleasure?

Mr. Kinne: I move that the nomination of Mr. Calvert Meade for the office of Secretary and Treasurer of this Association be declared to be the sense of the Association, and that the President be instructed to cast the ballot of the Association for Mr. Meade for those offices.

The motion was unanimously adopted, and the President then cast the ballot for and announced that Mr. Calvert Meade was the duly elected Secretary and Treasurer of the Association for the ensuing year.

The President: We cannot get along without him, gentlemen, and I am very glad to announce Mr. Meade's election.

We will now listen to nominations for the office of Assistant Secretary and Librarian.

Mr. Osborn: I nominate for that position the incumbent, Mr. J. P. Moore, whose work we all know so well, and move that the nominations close.

The motion was seconded, and the Secretary, on motion, cast the ballot of the Association for Mr. Moore, who was by the President then declared the duly elected Assistant Secretary and Librarian of the Association for the ensuing year.

The President: That concludes the election of officers. Is there anything further to come before the meeting?

Mr. Kinne: Mr. President, I desire before we close the meeting to move that a vote of thanks be extended to our retiring President, who has so ably conducted the proceedings here in this room, and brought about such a very successful meeting. It certainly reflects great credit upon him. And I move that Mr. Gunn be called to the chair for the purpose of putting the motion.

The motion unanimously prevailed, and Mr. Gunn assumed the chair and put the motion, which was adopted by a rising vote.

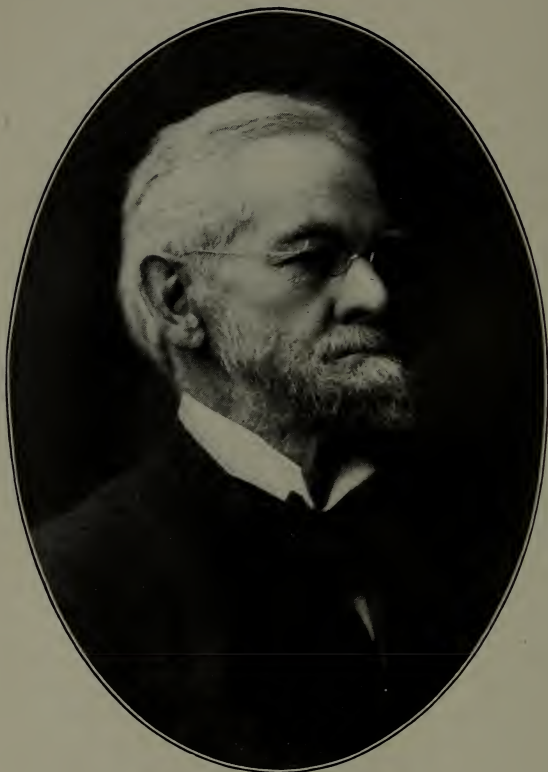
Mr. Gunn: It gives me a great deal of pleasure, Mr. President, to tender to you the thanks of this Association for the very excellent work that you have done in the position, and the excellent results attained as shown by this most interesting meeting.

The President: I certainly thank you very much, gentlemen, for your very kindly expression toward me. It has been a very great pleasure to me to feel that the meeting has been a success.

There is no further business before the meeting, and a motion to adjourn will be in order. You will, of course, all bear in mind that the annual dinner this evening will be held at the Fairmont Hotel.

Mr. Fuller: I move you, Mr. President, that the Thirtieth Annual Meeting of the Fire Underwriters' Association of the Pacific be now formally adjourned.

The motion was duly seconded and the meeting adjourned.



GEORGE DALLY DORNIN

George Dally Dornin

George Dally Dornin was born and raised in the city of New York. With the announcement of the discovery of gold in California, his adventurous spirit responded to the cry of Westward Ho, and he joined a band of Argonauts bound for our golden shores, made the long journey around Cape Horn, and entered the Golden Gate in August, 1849.

Though then but a boy in years, being still in his teens, he commenced manfully the struggle of life, and before he had reached his majority was engaged in business for himself in this city.

A victim of the conflagration of 1851, he struck out for the interior and located at North San Juan, where his integrity and ability soon earned him the confidence and esteem of his neighbors, who twice elected him to the State Legislature.

His activities there were various, one being that of a pioneer fire insurance agent, in which his intelligent work soon attracted attention at headquarters, and he was in due course invited to San Francisco to engage in local and special work, a class of employment then in its infancy.

In 1871 he was appointed General Agent of the Fireman's Fund Insurance Company. The following winter, in company with President Staples, he settled that Company's Chicago losses, and the next year thereafter represented the Company alone in the settlement of its Boston losses.

In 1873 he was elected Secretary of the Company, resigning in 1881 to become Manager of the Lion Fire Insurance Company. To this management he shortly added other prominent companies, but finally reduced his representation to a single company, the Springfield, which he represented at the time of his death.

Mr. Dornin was ever a prominent factor for good in underwriting councils. In his long and varied experience he met all the prominent underwriters of the country, and this acquaintance was kept alive by his attractiveness as a correspondent, while his mental activity and clearly expressed ideas made his opinions always welcome.

A devoted friend and an uncompromising antagonist, he followed the Bible injunction, "Whatsoever thy hand findeth to do, do it with thy might," and was always to be found in the fore-front in our professional discussions, championing what he considered the cause of right and justice.

His active brain has assisted in formulating, and his stalwart support has secured the enactment of many of the most important rules and customs of our profession, and in his death the community has lost an upright and progressive citizen, our Association a stalwart supporter, and each of us individually a valued friend.

WM. J. DUTTON.
GEO. C. BOARDMAN.
WM. MACDONALD.

Robert Harry Naunton

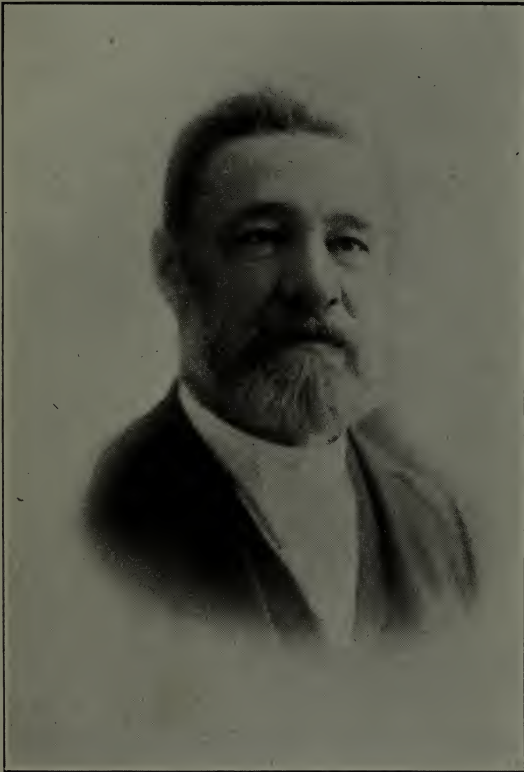
Dear Harry Naunton, his lips are sealed in the mystery of death. There is no answer to our call, no familiar laugh to greet our jest. The past is fragrant with his fellowship which knew no bounds and lacked no sympathy. He seemed to live in the atmosphere of the rich harvest that follows the sowing, and was in the midst of its festival at the tolling of the bell.

Thus we speak of Harry Naunton, who was born on the 6th day of November, 1840, in Ipswich, England, and passed away on the 19th day of June, 1907, at San Francisco, California. He received his education at Lycie Imperial de St. Ormer, France. In his early days he was of a roving disposition and served an apprenticeship with the Hudson Bay Company, where he developed those sterling qualities of self-reliance, courage and fortitude which so marked his career through life.

In 1869 he came to San Francisco, accepted a position of General Secretary of the British Consulate under Sir Wm. Lane Booker, remaining in that position for five years; thence to engage in the profession of insurance, where for the past fifteen years or more he was an independent adjuster.

E. P. FARNSWORTH,
CALVERT MEADE,
FRANK L. HUNTER,

Committee.



ROBERT HARRY NAUNTON



WILLIAM FRANK

William Frank

The death of our friend and associate, Mr. William Frank, on the 7th day of June last, removes from the councils of this Association and from the fraternity of Fire Underwriters, one of its oldest and most highly esteemed members. With the highest and keenest sense of personal and business integrity, during nearly forty years of active service on the Pacific Coast, Mr. Frank has endeared himself to those who now give their sad approval to this eulogy.

A sufferer for several years from a painful illness, Mr. Frank was, in a material sense, a victim of the great catastrophe of April, 1906, and its disastrous consequences to the business to which he had devoted his life energies. The passing of his wife, whose death preceded his own only by a few months, also added to his grief.

Mr. Frank was a native of Klotze, Prussia, aged sixty-eight years; became a resident of San Francisco in 1868, and has been identified since 1875 with the underwriting firm of Gutte & Frank. His many personal and business friends most sincerely deplore his untimely death and convey their heartfelt sympathy to his surviving son and daughter.

CESAR BERTHEAU,

GEO. D. DORNIN,

CHAS. CHRISTENSEN,

Committee.

Charles C. Echlin

WHEREAS: In the providence of God, we are called upon to recognize with sorrow and deep regret, the removal from our midst, of our former associate, Charles C. Echlin.

RESOLVED: That we deeply deplore the loss of one so long connected with us, and we do hereby bear tribute to his ability and reputation.

When but little more than a boy, he began his insurance career, as assistant book-keeper with the Home Mutual Insurance Company, afterwards called the Home Fire and Marine Insurance Company. Some years later he capably filled the position of Secretary of the Rocky Mountain Department of the same company, but the Department being finally abolished, he returned to San Francisco and acted as Special Agent until the company ceased writing business in July, 1906.

Shortly after, he accepted a position with the Aetna Insurance Company in a similar capacity and until the day of his death, enjoyed the good will, admiration and esteem of his employers and associates.

Of him it may be said that those who knew him best, honored him most.

RESOLVED: That to the afflicted wife and family, we offer our heartfelt sympathy, and that these resolutions be placed upon the minutes and a copy suitably engrossed, be sent to the family of our departed and lamented brother.

CHAS. B. HILL,
E. C. MORRISON,
EDW. E. EITEL,
Committee.



CHARLES C. ECHLIN

Charter Members of the Underwriters' Association of the Pacific

Organized February 23, 1876

- Bailey, Jas. D., General Agent, Union Insurance Co.
- *Barnes, E. T., General Agent, California Insurance Co.
- Bigelow, H. H., General Agent, Home Mutual Insurance Co.
- Brush, R. G., City Agent, State Investment & Insurance Co.
- *Brown, Edw., General Agent, Faneuil Hall & Lycoming Insurance Cos.
- *Bromwell, L. L., Special Agent, Phoenix and Home Insurance Cos.
- *Bryant, A. J., President State Investment & Insurance Co.
- *Callingham, Wm. J., General Agent, Royal Canadian Insurance Co.
- *Clark, Z. P., Agent, German-American Insurance Co.
- Dick, B. C., Agent, Kansas Insurance Co.
- Dickson, Robt., Manager, Imperial, Northern & Queen Insurance Cos.
- *Doolan, Wm., Special Agent, State Investment & Insurance Co.
- *Dornin, Geo. D., Secretary, Fireman's Fund Insurance Co.
- *Garniss, J. R., Adjuster.
- *Grant, Geo. F., Special Agent, North British & Mercantile Insurance Co.
- *Gunnison, A. R., Special Agent, Commercial Insurance Co. of California.
- *Hart, J. W., Agent, Scottish Commercial Insurance Co.
- *Houghton, J. F., President, Home Mutual Insurance Co.
- *Landers, Wm. J., Manager, San Francisco Agency, Guardian Assurance Co.
- *Lowe, B. F., Adjuster.
- Macdonald, William, Surveyor, Board of Fire Underwriters.
- Magill, R. H., General Agent, Home Mutual Insurance Co.
- Potter, E. E., of Potter, Jacobs & Easton, General Agents.
- Sexton, Wm., Special Agent, Fireman's Fund Insurance Co.
- Smith, A. D., General Agent, Northwestern, Amazon & Fairfield Insurance Cos.
- *Smith, Henry, Special Agent, Liverpool & London & Globe Insurance Co.
- Snow, H. W., Special Agent, Commercial Union Assurance Co.
- Spencer, Geo. W., Special Agent, Aetna Insurance Co.
- *Staples, J. W., Adjuster.
- *Deceased.

OFFICERS AND COMMITTEES

List of Officers and Committees of the Fire Underwriters' Association of the Pacific, since organization:

Year.	President.	Vice President.	Sec.-Treas.
1876	*Benjamin F. Low	Henry H. Bigelow	*John W. Staples
1877	*George D. Dornin	*Wm. L. Chalmers	*John W. Staples
1878	*Augustus P. Flin	*Edward Brown	*John W. Staples
1879	*Casper T. Hopki	Andrew D. Smith	*John W. Staples
1880	Geo. W. Spencer	E. W. Carpenter	*John W. Staples
1881	*Louis L. Bromwe	*Geo. F. Grant	*John W. Staples
1882	*George F. Grant	E. W. Carpenter	*John W. Staples
1883	E. W. Carpenter	William Sexton	*Robert H. Naunton
1884	William Sexton	C. Mason Kinne	*C. P. Farnfield
1885	C. Mason Kinne	*Zenas P. Clark	*Robert H. Naunton
1886	*Zenas P. Clark	*John W. Staples	*Robert H. Naunton
1887	*John W. Staples	*Wm. L. Chalmers	Bernard Faymonville
1888	*Wm. L. Chalmers	L. B. Edwards	Bernard Faymonville
1889	L. B. Edwards	*Wm. J. Callingham	Thomas W. Fenn
1890	B. Faymonville	Wm. H. Lowden	*Robert H. Naunton
1891	Wm. H. Lowden	Henry M. Grant	George H. Tyson
1892	Henry M. Grant	Stephen D. Ives	Edward Niles
1893	Stephen D. Ives	Rolla V. Watt	Russell W. Osborn
1894	Rolla V. Watt	V. Carus Driffield	Russell W. Osborn
1895	V. Carus Driffield	Herbert Folger	Louis Weinmann
1896	Herbert Folger	R. W. Osborn	Louis Weinmann
1897	R. W. Osborn	Edward Niles	Calvert Meade
1898	Louis Weinmann	Louis Weinmann	Calvert Meade
1899	Edward Niles	Frank J. Devlin	Calvert Meade
1900	Frank J. Devlin	Geo. W. Dornin	Calvert Meade
1901	Geo. W. Dornin	Wm. H. Gibbons	Calvert Meade
1902	Wm. H. Gibbons	Whitney Palache	Calvert Meade
1903	Whitney Palache	Jacob L. Fuller	Calvert Meade
1904	Jacob L. Fuller	A. W. Thornton	Calvert Meade
1905	A. W. Thornton	F. B. Kellam	Calvert Meade
1906	F. B. Kellam	Arthur M. Brown	Calvert Meade
1907	Arthur M. Brown	John W. Gunn	Calvert Meade

*Deceased.

EXECUTIVE COMMITTEE.

1876	*L. L. Bromwell	James R. Garniss	*George F. Grant
1877	*Edward Brown	William J. Sanders	Andrew D. Smith
1878	Andrew D. Smith	Oliver H. Cole	George W. Spencer
1879	*Augustus P. Flint	William Macdonald	*Albert R. Gunnison
1880	*George F. Grant	*Edward Brown	Oliver H. Cole
1881	George W. Spence	E. W. Carpenter	C. Mason Kinne
1882	Thomas E. Pope	Andrew D. Smith	*Thomas A. Mitchell
1883	*George F. Grant	Harvey W. Snow	Oliver Hawes
1884	*George F. Grant	Harvey W. Snow	Oliver Hawes
1885	*George F. Grant	Harvey W. Snow	Oliver Hawes
1886	*H. K. Belden	*George F. Ashton	Calvert Meade
1887	*H. K. Belden	*George F. Ashton	Calvert Meade
1888	*W. J. Callingham	George C. Pratt	Rolla V. Watt
1889	B. Faymonville	Wm. H. Lowden	*Henry K. Belden
1890	*H. K. Belden	*George Easton	Henry M. Grant
1891	*H. K. Belden	*George Easton	Alfred Stillman
1892	Alfred Stillman	*George Easton	V. Carus Driffield
1893	V. C. Driffield	Wm. H. Lowden	William Sexton
1894	Herbert Folger	Franz Jacoby	Jas. H. De Veuve
1895	R. W. Osborn	Frank J. Devlin	John T. Fogarty
1896	Frank J. Devlin	George W. Dornin	Whitney Palache
1897	*Frank G. Argall	Edward Niles	Robert P. Fabj
1898	Whitney Palache	*Wm. H. Bagley	Leslie A. Wright
1899	John T. Fogarty	Alfred R. Grim	Whitney Palache
1900	Edward Niles	Wm. H. Lowden	Russell W. Osborn
1901	Frank J. Devlin	Rolla V. Watt	William Sexton
1902	Geo. W. Dornin	Herbert Folger	Louis Weinmann
1903	W. H. Gibbons	Herbert Folger	Louis Weinmann
1904	Whitney Palache	W. H. Gibbons	George W. Dornin
1905	J. L. Fuller	A. W. Thornton	W. H. Gibbons
		Whitney Palache	George W. Dornin
1906	A. W. Thornton	F. B. Kellam	R. W. Osborn
		Louis Weinmann	Herbert Folger
1907	F. B. Kellam	Arthur M. Brown	Herbert Folger
		W. H. Gibbons	J. L. Fuller

LIBRARY COMMITTEE.

1876	Geo. W. Spencer	Robert M. Magill	Byron C. Dick
1877	*James W. Hart	Hugh Craig	Samuel D. Mayer
1878	J. W. Kinsley	Geo. W. Spencer	Ludwig Beck

*Deceased.

LIBRARY COMMITTEE—Concluded.

1879	Oliver H. Cole	Jos. C. Jennings	*Wm. J. Landers
1880	Geo. E. Butler	*Edward Brown	Chas. J. Van Tassel
1881	*John W. Staples	*Wm. J. Callingham	*Robert H. Naunton
1882	Geo. W. Spencer	*Samuel O. Hunt	*John W. Staples
1883	*John W. Staples	Geo. W. Spencer	*Robert H. Naunton
1884	*Casper T. Hopkin	*Geo. D. Dornin	*Andrew J. Bryant
1885	Geo. W. Spencer	William Sexton	*Samuel O. Hunt
1886	Geo. W. Spencer	William Sexton	
1887	Geo. W. Spencer	Rudolph Herold, Jr.	Thos. E. Pope
1888	Geo. W. Spencer	Edwin W. Carpenter	*John W. Staples
1889	Geo. W. Spencer	Edwin W. Carpenter	*John W. Staples
1890	Geo. W. Spencer	Edwin W. Carpenter	
1891	Geo. W. Spencer	Edwin W. Carpenter	*Alex. J. Wetzlar
1892	Geo. W. Spencer	Herbert Folger	Jas. H. De Veuve
1893	Herbert Folger	*Henry K. Belden	Richard C. Medcraft
1894	*Alex. J. Wetzlar	A. G. Dugan	Benj. J. Smith
1895	A. G. Dugan	Herbert Folger	Edw. P. Farnsworth
1896	*Frank G. Argall	George W. Dornin	Charles C. Echlin
1897	William Maris	*Charles C. Echlin	Herbert Folger
1898	Herbert Folger	Benj. J. Smith	Frederick B. Kellam
1899	Herbert Folger	H. McD. Spencer	Whitney Palache
1900	Herbert Folger	Frederick B. Kellam	*Frank G. Argall
1901	Jacob L. Fuller	Charles B. Hill	Peter F. Gilroy
1902	Jacob L. Fuller	Peter F. Gilroy	Frederick B. Kellam
1903	A. M. Brown	Clinton Folger	D. A. Spencer
1904	W. H. Lowden	Herbert Folger	Benj. J. Smith
1905	W. H. Lowden	Herbert Folger	Benj. J. Smith
1906	W. H. Lowden	Herbert Folger	Benj. J. Smith

CALIFORNIA KNAPSACK.

1879	Charles Mason Kinne, Editor	W. Macdonald, Associate Editor
1880	Charles Mason Kinne, Editor	
1881	Charles Mason Kinne, Editor	*G. F. Grant, Associate Editor
1882	Charles Mason Kinne, Editor	
1883	Charles Mason Kinne, Editor	
1884	Charles Mason Kinne, Editor	
1885	*George F. Grant, Editor	
1886	*George F. Grant, Editor	
1887	Edwin W. Carpenter, Editor	
1888	*Alexander J. Wetzlar, Editor	

*Deceased.

CALIFORNIA KNAPSACK—Concluded.

1889	*Alexander J. Wetzlar, Editor	
1890	*George F. Grant, Editor	
1891	*George F. Grant, Editor	
1892	*George F. Grant, Editor	
1893	*George F. Grant, Editor	
1894	*George F. Grant, Editor	Edward Niles, Associate Editor
1895	*George F. Grant, Editor	Edward Niles, Associate Editor
1896	*George F. Grant, Editor	Edward Niles, Associate Editor
1897	*George F. Grant, Editor	Edward Niles, Associate Editor
1898	*George F. Grant, Editor	Edward Niles, Associate Editor
1899	*George F. Grant, Editor	Edward Niles, Associate Editor
1900	*George F. Grant, Editor	Edward Niles, Associate Editor
1901	*George F. Grant, Editor	Edward Niles, Associate Editor
1902	*George F. Grant, Editor	Edward Niles, Associate Editor
1903	*George F. Grant, Editor	Edward Niles, Associate Editor
1904	*George F. Grant, Editor	Edward Niles, Associate Editor
1905	*George F. Grant, Editor	Edward Niles, Associate Editor
1906	*George F. Grant, Editor	Edward Niles, Associate Editor
1907	A. W. Thornton and A. C. Thornton	

DINNER COMMITTEE.

(From first banquet in 1881, George W. Spencer, retiring President, to the present time.)

	George W. Spencer	*George F. Grant
1907	George W. Spencer	C. Mason Kinne

*Deceased.



LIST OF MEMBERS

ACTIVE MEMBERS.

- Agnew, F. J., Special Agent, Pennsylvania Fire Ins. Co.
Alverson, W. W., with Continental Ins. Co.
Anderson, C. H., Special Agent, Springfield Ins. Co.
Ankele, J. H.
Archer, R. T., Independent Adjuster, Los Angeles, Cal.
Avery, Frank M., Asst. Manager, Western Dept. Fire Association.
Bailey, A. E., Special Agent, New York Underwriters.
Bailey, J. D., of Bailey & Johnston, General Agents, Insurance Company of North America.
Bangs, Franklin, Secretary, Home F. & M. Ins. Co.
Banks, J. H., Special Agent, Royal and Queen Ins. Co.
Bates, H. L. A., Manager, Shawnee Ins. Co.
Benner, Harry, Special Agent, German-American, Phoenix and German Alliance Ins. Cos.
Bertheau, C., Manager, Hanover Ins. Co.
Blanchard, H. P., Asst. Secretary, Fireman's Fund Ins. Co.
Boardman, Geo. C., of Boardman & Spencer, General Agents, Aetna Ins. Co.
Branch, F. M., Special Agent, New York Underwriters.
Breeding, W. H., Special Agent, Aetna Ins. Co.
Bromwell, L. L., General Agent, Milwaukee Mechanics' Ins. Co.
Brooks, Geo. W., Secretary, California Ins. Co.
Broomell, B. B., Special Agent and Adjuster.
Brown, A. M., of E. Brown & Sons, General Agents, Svea, Agricultural and Globe & Rutgers.
Brown, H. H., of E. Brown & Sons.
Brush, R. G., Special Agent, Liverpool & London & Globe Ins. Co.
Burgard, John H., Special Agent, Svea Ins. Co.
Burger, C. H., with Western Assurance Co.
Burke, H. R., Special Agent, Royal and Queen Ins. Cos.
Campbell, Warren, Special Agent for Manager Conroy's Companies, Los Angeles, Cal.
Caine, E. P., with McNear & Wayman Agency.
Cartwright, A. J., Special Agent, American Ins. Co. of New Jersey.
Christensen, Chas., of Christensen & Goodwin, Managers, American Central, St. Paul and Mercantile Ins. Cos.
Chapuis, F. A., Manager, Seaboard Ins. Co.

- Cleveland, W. W., of Cleveland & Trathen, Managers, Franklin Fire Ins. Co.
- Codding, Geo. C., Special Agent, Springfield Ins. Co.
- Conroy, T. J., of Conroy & Grim, Managers, Caledonian and Aachen & Munich Ins Cos.
- Cosgrove, J. E., Special Agent, Northern Assurance Co.
- Craft, Chas. A., Special Agent, Catton, Bell & Co.
- Crandall, J. E., Special Agent, Springfield F. & M. Ins. Co.
- Crux, Geo. A., Asst. Manager, Caledonian Ins. Co.
- Curtis, J. F. D., Manager, Prov.-Washington Ins. Co.
- Danker, H., with Western Assurance Co.
- Davies, Arthur P., Special Agent, Queen City Fire Ins. Co.
- Dearborn, G. W., Special Agent, McNear & Wayman Agency.
- De Lappe, R., Special Agent, American Central, St. Paul and Mercantile Ins. Cos.
- Dennis, Jas. J., Special Agent, Hartford Fire Ins. Co.
- Devlin, Frank J., Manager, Atlas and Manchester Assurance Cos.
- Devine, Geo. E., Special Agent, Hartford Fire Ins. Co.
- De Veuve, Clarence, General Agent, Seattle F. & M. Ins. Co.
- Dickson, Frank W., of Dickson & Thieme, Managers, Royal Exchange Assurance Co.
- Dollard, Robert E., Special Agent, Hartford Fire Ins. Co.
- Dornin, Geo. W., Manager, Springfield Ins. Co.
- Dornin, John C., Asst. Manager, Springfield Ins. Co.
- Driffield, V. Carus.
- Duckels, Thos. W., Special Agent, E. Brown & Sons.
- Dutton, W. J., President, Fireman's Fund Ins. Co.
- Dutton, Grayson, Special Agent, Fireman's Fund Ins. Co.
- Edwards, L. B.
- Eitel, Edw. E., Special Agent, Home F. & M. Ins. Co.
- Eldred, E. P., Special Agent, Royal Ins. Co.
- Elster, F. H., Special Agent, New York Underwriters.
- Elwell, W. T., Special Agent.
- Fabj, R. P., Special Agent, L. & L. & Globe Ins. Co.
- Farnsworth, Ed. P., Independent Adjuster.
- Farr, F. H., Special Agent, Royal and Queen Ins. Cos.
- Faymonville, Bernard, Vice-President, Fireman's Fund Ins. Co.
- Field, Alexander.
- Flack, E. B., Special Agent, Christensen & Goodwin.
- Fogarty, J. T., Asst. Manager, Royal and Queen Ins. Cos.
- Folger, Clinton, Joint Manager, New Zealand Ins. Co.
- Folger, Herbert, Asst. General Agent, German-American, Phoenix and German Alliance Ins. Cos.

- Fores Harry W., General Agent, Scottish Union & National Ins. Co.
- Fortmann, W. G., Special Agent, Aachen & Munich Ins. Co.
- Francis, Guy, Special Agent, Connecticut Fire Ins. Co.
- French, John S., Special Agent, Fireman's Fund Ins. Co.
- Frith, T. T., Special Agent, London Assurance Co
- Frudenberg L. S., Manager, Queen City Fire Ins. Co.
- Fuller, J. H., Special Agent, Norwich Union Fire Ins. Society.
- Fuller, J. L., Asst. Manager, Norwich Union Fire Ins. Society.
- Gabrielson, C. D., Special Agent, Royal and Queen Ins. Cos.
- Gallegos, R., Asst. Manager, Phoenix Assurance Co.
- Garrigue, R. H., Independent Adjuster.
- Gerould, P. E., Special Agent, Sun and Michigan Ins. Cos.
- Gibbons, W. H., General Inspector, E. Brown & Sons' General Agency.
- Giesy, A. W., Special Agent, National Fire Ins. Co.
- Gill, W. S., Special Agent, Svea Ins. Co.
- Gilliland, Adam, Special Agent, Hartford Fire Ins. Co.
- Goodwin, Benjamin, of Christensen & Goodwin, Managers American Central, St. Paul and Mercantile.
- Gordon, Harry F., of Gordon & Hoadley, General Agents, American N. J.
- Goggin, Gerald E., with London and Niagara Ins. Co.
- Gray, Geo. T., Special Agent, Christensen & Goodwin.
- Grant, H. M., Independent Adjuster, Portland, Oregon.
- Griffith, P. H., Special Agent, Hartford Fire Ins. Co.
- Griffith John T.
- Grim, Alfred R., of Conroy & Grim, Managers, Aachen & Munich Ins. Co.
- Grove, W. W., Special Agent, Hartford Ins. Co.
- Guerraz, Geo. F., Special Agent, Fireman's Fund Ins. Co.
- Gunn, John W., Asst. Secretary, Liverpool & London & Globe.
- Haldan, E. B.
- Hally, F. W.
- Hall, O. N., Special Agent, Phoenix Assurance Co.
- Hamilton, J. K., Asst. Gen'l Agent Ins. Co. of North America.
- Harrison, J. Hunter, Special Agent, Shawnee Ins. Co.
- Haven, Chas. D., Resident Secretary, Liverpool & London & Globe.
- Hawshurst, C. W., Special Agent, New Zealand Ins. Co.
- Henry, Carl A., of C. A. Henry & Co., General Agents, Sun Ins. Office and Michigan F. & M. Ins. Co.
- Henry, Paul M., Special Agent, North British and Merc. Ins. Co.

- Heuer, G. A. R., Special Agent, Aetna Ins. Co.
- Hewitt, Dixwell, of Palache & Hewitt, General Agents, Hartford Fire Ins. Co.
- Herold, Rudolph.
- Hildreth, P. P., Special Agent, British-America and Western Hill, Chas. B., Special Agent, German-American and Phoenix Ins. Cos.
- Hill, Chas. S., Special Agent, McNear & Wayman Agency.
- Hill, Wm. H., Special Agent, Edward Brown & Sons' General Agency.
- Hoadley, G. A., of Gordon & Hoadley, General Agents, American N. J.
- Hopkins, W. B., Special Agent, London & Lancashire Fire Ins. Co.
- Houseworth, Harrison, Special Agent, Liverpool & London & Globe Ins. Co.
- Hunter, F. L., Resident Manager, Northern Assurance Co.
- Hunter, R. D., Special Agent, Fireman's Fund Ins. Co.
- Ives, S. D., Vice-President, Home F. & M. Ins. Co.
- Jackson, A. H., Special Agent, American Ins. Co. N. J.
- Jackson, W. A., Special Agent, Commercial Union and Palatine Ins. Cos.
- Jacoby, Franz, Independent Adjuster.
- Johnston, Albert Sydney, Special Agent, London & Niagara Ins. Co.
- Johnston, J. C., of Bailey & Johnston, General Agents, Ins. Co. of North America.
- Kaltz, Bruce, Special Agent, National Fire Ins. Co.
- Kellam, F. B., Branch Secretary, Royal and Queen Ins. Cos.
- Keller, W. F., Special Agent, North British & Mercantile Ins. Co.
- Kenny, J. J., Manager, Western Assurance Co.
- Kinne, C. Mason, Asst. Resident Secretary, Liverpool & London & Globe.
- Klinger, Wm. M., Special Agent, Fireman's Fund Ins. Co.
- Koempel, H. C., Independent Adjuster.
- Lamey, H. T., Manager, Western Assurance and British-America Assurance Cos., Denver.
- Lamping, L. F., Special Agent, Royal Exchange Assurance Co.
- Landers, Wm. J., Resident Manager, London and Niagara Ins. Co.
- Langley, Chas. L., Special Agent, Catton, Bell & Co.
- Lindsay, A. N., Special Agent, California Ins. Co.
- Lockey, Richard, Independent Adjuster, Helena, Montana.
- Lord, H. Leslie, Special Agent, Sun and Michigan Ins. Cos.
- Lowden, W. H., Manager, Norwich Union Fire Ins. Society.

- Lyndall, Chas. P., Special Agent, Home F. & M. Ins. Co.
Macdonald, Wm., of Macdonald & Miles, Managers, Westchester Ins. Co.
McCarthy, C. V., Special Agent, Pennsylvania Fire Ins. Co.
McKowen, J. H., Independent Adjuster, Spokane, Wash.
Manheim, H. S.
Mann, H. R., Manager, New York Underwriters' Agency.
Manning, F. J. H., Special Agent, Commercial and Palatine Ins. Cos.
Manning, William. Special Agent, Atlas and Manchester Assurance Cos.
Manton, E. Grenville, Special Agent, Law Union & Crown Ins. Co.
Mariner, G. S., Special Agent, Norwich Union Fire Ins. Society.
Maris, Wm., Independent Adjuster.
Mayer, F. J. Alex., Oregon State Agent, Fire Association of Philadelphia.
Meade, Calvert, Independent Adjuster, Secretary Fire Underwriters' Association.
Medcraft, R. C., with Catton, Bell & Co.
Mel, Louis, Special Agent, Aetna Ins. Co.
Mendell, Geo. H., Jr.
Mendell, Jno. M., Special Agent, London and Niagara Ins. Cos.
Mesick, S. P., Supt. of Agencies, Pennsylvania Fire Ins. Co.
Miall, C. M., with C. J. Stoval's Agency.
Miles, D. E., of Macdonald & Miles, Managers, Westchester Ins. Co.
Miller, Chas. E., Special Agent, Hartford Ins. Co.
Miller, W. L. W., Asst. Manager, British-America and Western Assurance Cos.
Mitchell, Geo. M., Metropolitan Agent, Home Ins. Co.
Morgan, E. C., Special Agent, Prov.-Washington Ins. Co.
Morgan, W. O., Special Agent, Hartford Fire Ins. Co.
Morrison, Ed. C., Supervisor of Agencies, Aetna Ins. Co.
Morrow, J. H., Special Agent, Commercial Union Ins. Co.
Murphy, Joseph A., Special Agent, Aetna Ins. Co.
Nason, A. G., General Agent, Continental Ins. Company.
Niebling, E. T., Manager, Commercial Union and Palatine Insurance Companies.
Nippert Paul M., General Agent.
Osborn, R. W., Manager, Pennsylvania Fire Ins. Co.
Olney, P. de S., Special Agent, Commercial Union and Palatine Insurance Companies.

- Palache Whitney, of Palache & Hewitt, General Agents, Hartford Fire Insurance Co.
- Pierce, D. W., Supt. of Agencies, New York Underwriters.
- Porep, Walter P., Special Agent, Edward Brown & Sons.
- Quick, J. R., Special Agent, Fireman's Fund Ins. Co.
- Quitow, V. H., Special Agent, Pennsylvania Fire Ins. Co.
- Quitow, Chas., Special Agent, Home Ins. Co.
- Raymond, W. H., Special Agent, Liv. & London and Globe Ins. Co.
- Reed, James S., Special Agent, Connecticut Fire Ins. Co.
- Richards, J. H., General Agent, Walla Walla Ins. Co.
- Roberts, Tom R., Special Agent, C. J. Stovel Agency.
- Robins, F. C. H., Special Agent, California Ins. Co.
- Rountree R. H., Special Agent, Liv. & London & Globe Ins. Co.
- Rowe, E. A., Special Agent, McNear & Wayman Agencies.
- Schallenberger, C. A. Asst. Secretary California Ins. Co.
- Schlingheyde, C. E., Special Agent.
- Schnabel, O. E., Special Agent, New Zealand Ins. Co.
- Schoenemann, F. J., Special Agent, No. B. and Mercantile Ins. Co.
- Scott, Chas. O., Special Agent, Insurance Co. of North America.
- Sewell, A. F., Special Agent, New York Underwriters.
- Sexton, Wm., General Adjuster, Fireman's Fund Insurance Co.
- Sherrard, McKee, Special Agent, Fireman's Fund Ins. Co.
- Smedberg, W. R.
- Smith, Benj. J., Manager, Connecticut Fire Insurance Company.
- Smith, Frank G., Special Agent, London & Lancashire Ins. Co.
- Smith, C. W.
- Smith, H. Brownson, Independent Adjuster, Butte, Montana.
- Smith, H. H., Manager, Union Assurance and Law Union & Crown Insurance Companies.
- Smith, Roderick E., Special Agent, London & Niagara Ins. Co.
- Spaulding, M. E., Special Agent, Hartford Fire Ins. Co.
- Spears, J. V., Special Agent, Fireman's Fund Ins. Co.
- Spencer, D. A.
- Spencer, Geo. W., of Boardman & Spencer, Gen'l. Ag'ts., Aetna Ins. Co.
- Spencer, H. McD., Independent Adjuster.
- Speyer, Walter M., Joint Manager New Zealand Ins. Co.
- Staniford, F. C., Special Agent, Norwich Union Fire Ins. Society.
- Stewart, D. L., Special Agent, Royal Ins. Co.
- Stovel C. J., General Agent, Jefferson, Girard, Nassau, New Brunswick and North River Ins. Co's.
- Stoy, Samuel B., Special Agent, London & Lancashire Fire Ins. Co.

- Thieme, Oscar, of Dickson & Thieme, Manager Royal Exchange Association.
- Thompson, Chas. R., Special Agent, Fireman's Fund Ins. Co.
- Thomson, M. H., Asst. Gen'l. Agt., National, Colonial Fire Underwriters.
- Thornton, A. W., Special Agent, London and Niagara Ins. Co's.
- Thornton, A. C., Special Agent, Fireman's Fund Ins. Co.
- Tiedemann, T. J. A., General Agent, Michigan Commercial Ins. Co.
- Tower, Frank H., Independent Adjuster, Los Angeles.
- Trathen, A. H., of Cleveland & Trathen, Managers Franklin Fire Ins. Co.
- Trumbull, J. B., Special Agent, Insurance Co. of North America.
- Tyson, Geo. H., General Agent, German-American, Phoenix and German-Alliance Ins. Co's.
- Urmston, J. K., Special Agent, Royal and Queen Ins. Co's.
- Van Valkenburg, Chas., Special Agent, Svea Ins. Co.
- Walden, J. B., Special Agent, Royal and Queen Insurance Cos.
- Watson, I. S., Special Agent, Christensen & Goodwin Agency.
- Watson, Kenneth, of Watson, Taylor & Sperry.
- Ward, C. H., General Agent, Firemen's Ins. Co.
- Warner, J. W., Special Agent, California Ins. Co.
- Waters, J. N., Special Agent, Sun and Michigan Ins. Co's.
- Watt, Rolla V., Manager, Royal and Queen Insurance Companies.
- Wayman, W. O., Manager, National, Colonial Fire Underwriters Ins. Co's.
- Webber, J. F. R., Special Agent, Springfield F. & M. Ins. Co.
- Weinmann, Louis, Secretary, Fireman's Fund Insurance Co.
- Wellington, Geo. J.
- Wendler, Chas. A., Special Agent, Royal and Queen Ins. Co's.
- Westlake, W. B., Special Agent, E. Brown & Sons.
- Whelan, W. D., Special Agent, Fireman's Fund Ins. Co.
- White F. G., Special Agent, Fireman's Fund Insurance Company.
- Whitmer, A. W.
- Whitley, N. B., Independent Adjuster, Seattle.
- Windus W. V., Special Agent, Catton, Bell & Co.
- Williams, T. H., Special Agent, German-American, Phoenix and German-Alliance Ins. Co's.
- Wilson, J. Scott.
- Wilson, F. P., State Agent, Fidelity Fire Ins. Co.
- Wyper, James, Manager, London and Lancashire Fire Ins. Co.
- Young E. J., Special Agent, North British & Mercantile Ins. Co.
- Young, Frank H., Special Agent, Springfield Ins. Co.
- Young, Walter H., Special Agent, Hamburg, Bremen Fire Ins. Co.
- Zwick Wm. F., Special Agent, Christensen & Goodwin Agency.

ASSOCIATE MEMBERS

Banner, Geo. H.	Folger, R. S.	Mills, H. F.
Barrett, L. W.	Hackett, William H.	Muir, Andrew R.
Barsotti, Charles	Hougaard, W. F.	Oxley, G. E.
Bishop, Wilson	Lester, Albert M.	Pattison, Fred C.
Burton, A. E.	Lowden, E. Kenneth	Stanbridge, C. H.
Chase, Harvey T.	Ludlow, Geo. W.	Thomas, F. G.
Conley, C.	McAnderson, Jno.	Vanderlip, H. F.
Daniels, A. N.	Magill, F. M.	Wilkinson, C. W.
Dobie, Chas. C.		Yates, Roy O.

HONORARY MEMBERS

Bigelow, H. H., Fresno Co., Cal.
 Geo. E. Butler, San Francisco.
 Chard, Thomas S., Chicago, Ill.
 Carpenter E. W., Roxbury, Mass.
 Carey, Jas. A., San Francisco.
 Cofran, J. W. G., Chicago, Ill.
 B. C. Dick, Oakland, Cal.
 Dickson, Robt., New York.
 Donnell, S. M., San Francisco.
 Drew, Cyrus K., Denver.
 Du Val, W. S., San Francisco.
 Grant, Tom C., San Francisco.
 Gurrey, A. R., Honolulu, H. I.
 Heifner, C. G., Olympia, Wash.
 James, N. T., San Francisco.
 Low, Geo. P., San Francisco.
 Laton, Chas. A., San Francisco.
 Marshall, John, Jr., Chicago, Ill.
 McElhone, F. H., Chicago, Ill.
 McKenzie, Lee, Seattle, Wash.
 Mohrhardt E. F., San Francisco.
 Morrow, J. H., Los Angeles, Cal.
 Neal, Robt. W., San Francisco.
 Niles, Edward, New York.
 Parkhurst, H. E., Salt Lake City, Utah.
 Porter, F. H., San Francisco.
 Robertson, Geo. N., San Francisco, Cal.
 Stillman, Alfred, San Francisco.
 Stone, J. C., Portland, Oregon.
 Smith, A. D. Oakland, Cal.
 Thompson, E. L., Portland, Oregon.
 Wilson, D. B., San Francisco.
 Winne, Peter Denver, Colo.

San Francisco Addresses of the Officers of the Fire Underwriters' Association of the Pacific for the year 1908

John W. Gunn, President.....	444 California St.
Adam Gilliland, Vice-President.....	430 California St.
Calvert Meade, Secretary-Treasurer.....	558 Sacramento St.
J. P. Moore, Asst. Secretary and Librarian.....	
.....	1401 Merchants Exchange Bldg.
Arthur M. Brown, Chairman Executive Committee.....	108 Front St.
A. W. Thornton, Editor Knapsack.....	Seattle, Wash.
A. C. Thornton, Associate Editor Knapsack...	401 California St.
Association Library Room.....	1401 Merchants Exchange Bldg.



JOHN W. GUNN

PROCEEDINGS

OF THE

THIRTY-THIRD ANNUAL MEETING

OF THE

FIRE UNDERWRITERS'
ASSOCIATION

OF THE PACIFIC

SAN FRANCISCO, CAL., JANUARY 5-6, 1909

Printed by Order of the Association

1909

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FIRE UNDERWRITERS' ASSOCIATION OF THE PACIFIC

OFFICERS FOR 1908.

President	John W. Gunn
Vice-President	Adam Gilliland
Secretary and Treasurer	Calvert Meade
Assistant Secretary and Librarian	J. P. Moore

EXECUTIVE COMMITTEE

Arthur M. Brown	John W. Gunn
Frank J. Devlin	Russell W. Osborn
J. L. Fuller	

DINNER COMMITTEE

George W. Spencer	C. Mason Kinne
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CALIFORNIA KNAPSACK

A. W. Thornton	Editor
A. C. Thornton	Associate Editor

Fire Underwriters' Association of the Pacific

FIRST DAY.

San Francisco, Cal., Jan. 5, 1909.

The following members and guests were present at the Annual Meeting of January 5 and 6, 1909:

Agnew, F. J.	Cosgrove, J. E.	Folger, C.
Anderson, C. H.	Coulter, Geo. B.	Folger, H.
Atkins, F. E.	Crandall, J. E.	Folger, Roy
Avery, F. M.	Critchell, R. M.	Fortmann, W. G.
Bailey, A. E.	Crux, Geo. A.	Francis, G.
Bailey, M. D.	Culver, E. V.	French, J. S.
Banks, J. H.	Curtis, J. F. D.	Frasier, W. R.
Bates, H. L. A.	Dalziel, J.	Fritschi, A. R.
Breeding, W. H.	Daniels, A. N.	Frith, T. T.
Benner, H.	Danker, H.	Froiseth, B.
Bertheau, R. C.	Davies, A. P.	Frudenberg, L. S.
Blanchard, H. P.	Davis, B. L.	Fuller, J. L.
Boyd, R.	Dean, W. E.	Fuller, J. H.
Branch, F. M.	Dearborn, G. W.	Gallegos, R.
Brewer, L. V.	De Jarnatt, W. B.	Gabrielson, C. D.
Brooks, Geo. W.	Dollard, R. E.	Gay, J. R.
Brown, A. M.	De Lappe, R.	Gardiner, T. M.
Brown, J. B. Jr.	Dennis, J. J.	Gerould, P. E.
Burger, C. H.	Devine, G. E.	Gibbons, W. H.
Burke, H. R.	Devlin, F. J.	Gilliland, Adam
Buswell, H. C. R.	Dibble, L. L.	Goggin, G. E.
Caine, E. P.	Dickman, Chas.	Goodwin, B.
Campbell, W. R. L.	Driffield, V. C.	Gordon, H. F.
Cartwright, A. J.	Durbrow, P.	Gordon, McKenzie
Carter, Dan F.	Dornin, Geo. W.	Gray, Geo. T.
Cassell, W. P.	Dutton, W. J.	Granger, H. T.
Chapman, A. J.	Dutton, G.	Greenwalt, C. L.
Chapuis, F. A.	Eastwood, Orlo	Griffith, P. H.
Clark, H. D.	Elster, F. H.	Grove, W. W.
Cleveland, W. W.	Eldred, E. P.	Gunn, John W.
Codding, G. C.	Fabj, R. P.	Hackmeier, W. C.
Cobb, C. D.	Faymonville, B.	Hammond, J. J.
Cobb, J. F.	Field, A.	Harold, C. R.
Conklin, L. A.	Fisken, A. K.	Harlow, F. E.
Conly, C.	Flack, E. B.	Harrison, J. H.
Coogan, T. C.	Fogarty, J. T.	Hatcher, J. B.

Hawxhurst, C. W.	Moelleung, E. A.	Sherrard, McKee
Haven, Chas. D.	Mohrhardt, E. F.	Silvershield, H.
Hayes, G. W.	Morgan, E. C.	Simmen, S.
Henry, Carl	Morgan, W. O.	Smith, A. D.
Heuer, G. A. R.	Morrison, E. C.	Smith, B. J.
Heuer, Phil	Morrow, J. H.	Smith, C. W.
Hewitt, D.	Muir, A. R.	Smith, F. G.
Hill, C. B.	Murphy, J. A.	Smith, R. E.
Hildreth, H. P.	Myrick, C. S.	Spaulding, M. E.
Hitchcock, C. I.	McCarthy, C. V.	Speyer, W. M.
Hoadley, G. O.	McCarthy, E. W.	Staniford, F. C.
Hopkins, W. B.	McElroy, R. D.	Stewart, D. L.
Hougaard, J. A.	McElroy, J. R.	Stewart, Neil
Houseworth, H.	McKenzie, Lee	Stich, R. G.
Howard, J. C.	McKinley, L. M.	Stone, F. E.
Hunter, F. L.	McNear, Geo. W. Jr.	Stone, F. F.
Hunter, R. D.	Neal, Robert W.	Swan, Geo. W.
Houpt, F. L.	Newboul, Robt.	Theobold, Geo.
Huston, E.	Nichols, Hon. S. H.	Tickner, H. B.
Irving, W.	Niebling, E. T.	Tiedemann, T. J. A.
Jackson, A. H.	Niemann, C. F. E.	Thompson, C. R.
Jackson, H. R.	O'Brien, M. F.	Thompson, M. H.
Jackson, W. A.	Olney, P. de S.	Thompson, W. H.
Jennings, L. S.	Osborn, R. W.	Thornton, A. C.
Kellam, F. B.	Palmer, G.	Thornton, A. W.
Kenny, J. J.	Parker, D. A.	Trumbull, J. B.
Kinne, C. Mason	Pane, F. C.	Tyson, G. H.
Knowles, E. C. F.	Parkhurst, H. E.	Urmston, J. K.
Kuhl, W. F.	Parrish, E.	Walden, J. B.
Landon, H. S.	Payne, G. L.	Ward, H.
Langley, Chas. L.	Penfield, A. J.	Warner, J. W.
Lindsay, A. N.	Perry, F. J.	Watt, R. V.
Lord, L. H.	Pierce, D. W.	Watson, I. S.
Louis, W. A.	Quick, J. R.	Wayman, W. O.
Lowden, K.	Quitow, V. H.	Webber, A. E.
Lowden, W. H.	Quitow, Chas.	Webber, J. F. R.
Lyndall, C. P.	Raser, H. A.	Weinmann, P. R.
Macdonald, B.	Raymond, W. H.	Weinmann, L.
Macdonald, Wm.	Richards, J. D.	Wellington, Geo. J.
Madge, Hon. S. A.	Richards, J. H.	Wendler, C. A.
Manheim, H. S.	Rimmer, J. C.	Wheeler, H. M.
Mann, H. R.	Robins, F. C. H.	Whelan, W. D.
Mann, H. R. Jr.	Robins, L.	Wennstrom, J. A.
Manning, F. J. H.	Roberts, G. F.	White, C. G.
Mannings, Wm.	Rogers, L. B.	Whitmer, A. W.
Manton, E. G.	Rountree, R. H.	Wilson, E. C.
Mariner, G. S.	Sabin, H. W.	Williams, F.
Maris, Wm.	Sachs, W. D.	Winterburn, J. C.
Marshall, John Jr.	Schallenberger, C. A.	Woessner, H. J.
Meade, Calvert	Schlingheyde, C. E.	Wolbold, H.
Mendell, J. M.	Schively, Hon. J. H.	Wolf, Hon. E. Myron
Miller, W. L. W.	Schoeneman, F. J.	Wright, A. C.
Miller, C. E.	Sexton, Wm.	Young, F. H.
Miles, D. E.	Sewell, A. F.	Young, W. H.

The meeting was called to order at 10 o'clock a. m. by the President of the Association, John W. Gunn.

The President: Gentlemen, it is unnecessary to say that I extend to you a very cordial greeting, and the best wishes of myself personally and the Association for a Happy New Year.

The first order of business is the calling of the Roll? Shall that be dispensed with?

The Secretary moved that it be dispensed with.

The President: If there is no objection, it is so ordered. The reading of the minutes of the previous meeting.

The Secretary: I move that it be dispensed with.

The President: The minutes have been printed and the reading may be dispensed with. The report of the Secretary and Treasurer.

The Secretary: Mr. President and Members, this is my report for the year ending January 6, 1909, both as Secretary and Treasurer:

FIRE UNDERWRITERS' ASSOCIATION OF THE PACIFIC. Financial Statement.

Receipts.

Balance in Bank of California, Jan. 15, 1908.	\$ 516.13
Received for Annual Dues.....	\$1,195.00
Received for Assessment, 1906.....	30.00
Received for Donations to Library.....	285.00
Received for Initiations.....	130.00
Received for Insurance Literature and Keys.	4.50
Received for Annual Proceedings.....	7.50
Received for Dividends Fireman's Fund Ins. Co., 1 Share Stock.....	10.00
	1,662.00
	\$2,178.13

Disbursements.

Paid stationery, printing and supplies.....	\$ 94.40
Paid subscriptions, books and publications..	48.35
Paid deficit annual dinner, 1908.....	71.15
Paid stenographic report.....	58.00
Paid binding 86 volumes.....	90.35
Paid unit cases and cards.....	48.05
Paid Librarian for services rendered.....	575.00
Paid Annual Proceedings, 1908.....	344.85
Paid postage, telephone, express and delivery	60.15

APPLICATION FOR MEMBERSHIP.

Paid five floral pieces.....	50.00	
Paid rent of extra chairs.....	4.50	
Paid keys for Library.....	10.00	
Paid lettering Library door.....	2.40	
		1,457.20
		<hr/>
Balance in Bank of California.....		\$ 720.93

Insurance Institute—Financial Statement.

No transactions during 1908.

Balance in Bank of California.....	\$125.55
Audited and found correct.	

Signed: ARTHUR M. BROWN,
 J. L. FULLER.

Active members, Jan. 15, 1908.....	247	
Elected during year.....	31	
Transferred from honorary membership.....	1	
		279
		<hr/>
Resigned	4	
Transferred to honorary membership.....	4	
Dropped for non-payment of dues.....	2	
Deceased	4	
		14
		<hr/>
Total active members Jan. 6, 1909.....		265
Total associate members Jan. 6, 1909.....		27
Total honorary members Jan. 6, 1909.....		38
		<hr/>
Total membership Jan. 6, 1909.....		330

President: Gentlemen, what will you do with the report of the Secretary and Treasurer?

Mr. Weinmann: I move that the report be accepted.

Mr. Kinne: I second the motion.

The motion passed unanimously.

The President: We will next consider applications for membership. The Secretary will please read the names.

A. C. Wright, special agent E. Brown & Sons.

F. L. Emerick, special agent Washington Fire Ins. Co.

J. C. Howard, special agent N. Y. Underwriters.

H. C. R. Buswell, special agent Michigan Com'l Ins. Co.

Neil Stewart, special agent Michigan Com'l Ins. Co.

L. M. McKinley, special agent Law Union and Crown Co.

- R. G. Stich, special agent Western Assurance Co.
Wm. F. Kuhl, special agent Ins. Co. of North America.
P. R. Weinmann, special agent California Ins. Co.
C. R. Harold, special agent London Assurance Co.
R. T. Boyd, special agent London Assurance Co.
J. B. Hatcher, special agent German-American Ins. Co.
D. A. Parker, special agent New Zealand Ins. Co.
J. H. Morrow, special agent Com'l Union and Palatine.
W. A. Frazier, special agent St. Paul Fire and Marine Ins. Co.
L. L. Dibble, special agent St. Paul Fire and Marine Ins. Co.
F. J. Perry, special agent Royal and Queen Ins. Co.
H. B. Tickner, special agent Fireman's Fund Ins. Co.
W. P. Cassell, special agent Fireman's Fund Ins. Co.
C. F. E. Niemann, special agent German-American Ins. Co.
J. R. Gay, special agent Phoenix Assurance Co.
E. C. F. Knowles, special agent Phoenix Assurance Co.
A. J. Penfield, special agent Atlas Assurance Co.
J. A. Hougaard, general inspector North B. and Merc. Ins. Co.
Henry Hall, independent adjuster, Spokane, Wash.
James F. Cobb, manager Dixie Fire Ins. Co.
Edwin Parrish, joint manager London Assurance Co.
Washington Irving, general agent Phoenix Assurance Co.
Andrew Wilkie, appraiser, San Francisco.
J. F. McGee, manager Insurance Association.
Bernard Froiseth, special agent California Ins. Co.
H. E. Parkhurst, special agent Com'l Union and Palatine.

The President: Gentlemen, you have heard the list of proposals for membership. If there are no objections we will vote the list as a whole.

Mr. Kinne: I move that the Secretary cast the ballot.

Mr. Weinmann: I second the motion.

The Secretary: The ballot is cast in their favor.

Mr. Kinne: I have some additional members to propose.

The President: Active or honorary members?

Mr. Kinne: It has always been the rule of our Association that when anyone who has been a manager of a company retires to place him on the honorary list of members of our Association. That makes him a member, but he does not have to pay dues

I propose the names of Mr. V. C. Drifffield, Mr. L. B. Edwards, Mr. Rudolph Herold and Mr. C. F. Mullins.

The Secretary: I second the motion.

Mr. Thornton: In addition to the names that have been proposed for honorary membership I would like to suggest the name of a gentleman who has visited us very frequently in the past and who has earned our respect and esteem. He has been very frequently at our annual meetings. The Hon. Samuel H. Nichols, who has for several years been Insurance Commissioner for the State of Washington, and now retires from that office to resume his position as Secretary of State. In addition to the names already mentioned, we have on our honorary list the names of newspaper men who have contributed valuable articles, and this year we have with us a gentleman who has journeyed a long way to contribute an article for the present meeting. I propose the name of Mr. C. I. Hitchcock, of Louisville, Ky., for honorary membership.

Mr. Weinmann: I move that the Secretary cast the ballot.

The Secretary: The ballot is cast in favor of the gentlemen mentioned.

The President: With all due respect to the members elected here to honorary membership, I feel that we have given possibly our best tribute to my good old friend, Sam Nichols, who is here today. He is not now actively associated with insurance matters, but has been re-elected Secretary of State for the State of Washington for a third term. I trust that he will be spared to the State of Washington for many years to come. We are glad to have you with us, Mr. Nichols.

Mr. Nichols: Gentlemen of the Convention, I assure you that I accept this honorary membership from you with pleasure, and I want you to understand that I do not propose to desert you. I hope that I will live and have good health, and sometimes come to the meetings of your Association, during the years to come. Gentlemen, I thank you.

The Secretary: There are two gentlemen who have been for many years connected with the publication of San Francisco papers devoted to insurance—Mr. E. H. Bacon and Mr. J. C. Piver. I desire to propose both of these gentlemen for honorary membership in this Association.

Mr. Thornton: I second the motion.

The motion unanimously prevailed.

The President: The next order of business is the report from the Committee on Constitution and By-Laws. Col. Kinne has asked until tomorrow to report, and that each of you take a printed copy of the proposed Constitution and By-Laws and look it over tonight. If you have any objections, be prepared to spring them tomorrow.

We will now listen to the Librarian's report—Mr. J. P. Moore.

LIBRARIAN'S REPORT.

The making of a library has no end. As your Librarian, the most that I can do is to report progress.

After the 1906 conflagration we had just one volume left. Since that date we have acquired by donation, by exchange or by purchase 312 volumes bound, 307 pamphlets and 60 leaflets unbound. We have published the Proceedings of this Association for the years 1906, 1907 and 1908. Of these we have on hand as follows:

Proceedings of 1906.....	205 copies
Proceedings of 1907.....	167 copies
Proceedings of 1908.....	136 copies
Total.....	508 copies

We have also published "The Water Supply of Cities, With Especial Reference to Fire Protection." Of this we have on hand 174 copies.

It will thus be seen that our shelves hold of bound volumes, pamphlets and Proceedings, a total of 1365.

That we are able to make even as good a showing as this has been largely due to the generosity of a few of our members and to our foreign correspondents. From the latter we have received very full reports of the various Insurance Institutes. In this department we are now more fully supplied than before the conflagration. I hope that some of you who are generously disposed will give the library a full set of the Reports of the Federation of Insurance Institutes of Great Britain and Ireland, as we need them.

As the years go by it is more and more difficult to get complete sets of valuable works on insurance subjects.

I have done my best to secure an endowment fund of at least \$5000 for the use of the library. If each of you will use your influence the coming year that amount can be raised.

The library needs and must have books, and it takes money

to buy them. A few of you are thoughtful enough to send to the library all papers, magazines and books not specially or daily needed. If all would do this it would help the growth of the library.

If you have made your will (if not, do so at once), please add a codicil leaving all your insurance books to the library. In the land to which we are all hastening I trust you will not need any fire insurance literature. If you haven't any books to leave, then make a cash donation, however small it may be.

The value of our library seems to be more and more recognized by our members. The visits for information touching on all sorts of insurance questions have steadily increased. There are now more of such calls in a week than there were formerly in a whole year. (Average three daily.) If our shelves were supplied as they should be such calls would be more frequent.

The manager of one company has adopted the very sensible plan of encouraging his men to be students of fire insurance. As a result, some of them come almost daily to the library, and I have, at the manager's request, given them a course of study in insurance literature.

Frequent inquiries have been made as to when, if ever, the work of the Institute is to be taken up again. **That an Institute is needed there can be no doubt.**

"He who ceases to be a Student, ceases to be a Master." This is as true of the manager as of the field man, the special agent or the clerk in the office.

The value of the Library can not be overestimated, for the requirements of the future will be constantly increasing.

Permit me in closing to quote from the address of Mr. H. W. Eaton on "Our Duty to Our Profession."

"I hold it to be the duty of every one to steadily and industriously accumulate his knowledge and apply it to the general store.

"The Science of Fire Underwriting is far from exact. Its crudeness is still most patent, and golden opportunities exist for the thoughtful student in fire underwriting to earn his place amongst the ornaments of his profession."

(Applause.)

The President: We are all very much interested in the Library. It is particularly gratifying to me that the institution is getting on its feet. Of this, however, we will have something to say later.

Vice-President Adam Gilliland then assumed the chair.

PRESIDENT GUNN'S ADDRESS.

Gentlemen of the Association:

Possibly of least importance to you, but of considerable worry to the President is the annual address. The head of a modern commercial corporation, in reviewing a year's business, has at his disposal sundry and divers data of great interest to his constituents, all leading to the crucial finale of profit or loss, and to which side of the account the balance gravitates depends the success or failure of his stewardship. But the President of an organization such as the one now in session cannot draw upon such a fund, either for inspiration for himself or interest for his auditors. His success depends largely upon the quality of the papers read at the annual meeting over which he presides, and, to some extent, the quality and quantity of the elements which cheer and satisfy at the annual banquet. There is comfort, however, in the thought that should the program prove a failure, the blame may be floated to the contributors; and should the banquet fail to satisfy, cheer or inebriate, the President may deny liability, and leave the dinner committee in full possession of the unadjusted and indigestible matters on hand. These confidences will, undoubtedly, be welcomed by present and future aspirants, and taken as assurance that a man smaller even than President-elect Taft may hold the job down for a year without wrecking the institution. The annual address, however, is bound to cause worry. Perhaps it would be just as well to apply the instructions of the young Irish officer, who, when about to lead a company of raw recruits into battle, said, "Byes, whin ye meet th' inemy, trust to Providence, shut yer eyes and shoot like hell." Nevertheless, the address, good or bad, will receive courteous and dignified consideration from the committee, a complimentary position in the printed proceedings and thenceforth it will be avoided by both the studious and the curious.

Necrology.

Before giving our attention to subjects which concern our business life, let us pay our tribute of respect to the memory of those whose chairs are today vacant. During the year just closed the silent reaper cut deep into the ripened grain. L. L. Bromwell, on the 20th day of February, 1877, called our first annual meeting to order, and his paper on "Losses and Adjustments" is the beginning of the now almost priceless proceedings of our Association. He was President in the year 1881, and for twenty years thereafter his name running through our annual reports is a familiar and an attractive one. William J. Landers was also a contributor to the first program. His paper on "Forms of Policies" is worthy of careful consideration, even in this day and by this generation. As a member of the Executive Committee for many years and as a writer of several important

papers, he gave faithful service in starting the Association on its long career of usefulness and success. Messrs. B. C. Dick and George W. Spencer were also participants in that first memorable gathering, being on the original committee to form the nucleus for our library. Those four pioneers last year joined the silent majority. They have preceded even the youngest of us but a little while, and to each, thoughtless or thoughtful, gay or grave, young or old, must come the admonition to "work while it is yet called day, for the night cometh when no man can labor." With due respect and keenest appreciation of the personal and professional worth of all of our absent brethren, it will be conceded that the Association's greatest bereavement came when the death of George W. Spencer was announced. From the date of our organization, thirty-three years ago, to the very day he left us, his interest in our welfare was not only cordial and lively, but it had in it the enthusiasm and energy of youth. He was our President in the year 1880, and his various papers and extempore remarks running through the proceedings, if printed and bound together, would make a valuable addition to our general insurance literature. Let it be said here in all sincerity and with no feeling save that of justice, that George W. Spencer was the first of his profession to ask from Man a square deal for San Francisco when the forces of nature had left her all but helpless. He died in the harness, loved and respected by all who knew him. Eulogies are useless. If we could gather all the flowers that grow in this sunny land and scatter them over his resting place they could not add beauty or fragrance to the memory of the rugged, gentle and upright man, who tho' dead yet speaketh through the precept and example set while he was yet one of us.

General Results.

Our annual meetings are now held at so early a date that it is impossible to even approximately estimate the underwriting results of the year just closed. It may, however, be said with safety that the year was a fairly satisfactory one on this Coast. It will take very many good years, however, before the Companies' surplus will be large enough to withstand another 1906, and so far as dividends are concerned, stockholders in Insurance Companies will have to have faith, the same being defined by the Apostle Paul as "the substance of things hoped for, the evidence of things not seen."

It was a busy year for the Board of Underwriters inasmuch as the unsettled conditions following the upheaval of 1906, necessarily, like tenacious fevers had to wear themselves out. It would indeed be hard to estimate the value of the arduous work of the Board and its various committees in adjusting and caring for the perplexing and irritating questions and conditions constantly confronting them. The brief circulars received by you

from time to time, correcting a rate here, promulgating a rule there, etc., etc., may seem, particularly to local agents, as the lazy work of some lazy official whose only object in life seems to be to disturb the reveries of some equally lazy local agent; but if it were known that every word and every line of those circulars represented the unselfish, untiring and gratuitous efforts of the ablest men in the business, honestly endeavoring to maintain in fact the "greatest good to the greatest number," stockholder, manager, agent and insured alike, it is probable that the misunderstanding, distrust and hostility so constantly arrayed against this invaluable institution would quickly disappear. The Board is not perfect, nor is any claim to perfection assumed. Indeed, along certain lines there is room for improvement. There is no intention to go into details, but as this is the only reference made to the Board in this address, it may not be amiss to mention two complaints which frequently come to the attention of the Special Agent and Manager. The first is the obscure meaning, on account of phraseology, of many of the Board publications, particularly clauses of a vital nature. Some of these seem absolutely innocent of the rules of the mother tongue and consequently impossible of interpretation. The honest average agent coming in contact with an ambiguous clause or rule, usually takes it up with his office by correspondence, while his unscrupulous competitor and the crafty broker apply their own interpretation, always in favor of the insured, and in due time the Board is forced to grant relief. Naturally the honest agent comes to believe that there is a "stand-in" somewhere, and the sum total of misunderstanding, distrust and hostility is increased to the extent of his influence. The charge that words were made to conceal thoughts seems to be true in the case of the person, whoever he is, who constructs many of the rules and clauses emanating from the Board. Another charge we have to meet is that our Board managers and their several assistants are snow men from the Arctic Circle, who have forgotten to thaw out in this genial clime. Their offices are refrigerators; their words are the breath of the North wind, and their letters are written with icicles. Few of us who know personally the estimable gentlemen referred to will concede this statement. If, however, there is a tendency to freeze the local agents who attempt to carry their troubles to headquarters, a change in the atmosphere should be insisted upon. No institution is so big or so strong that it can afford to be discourteous to the humblest who enter its precincts with good intent. Gentlemen, the Board is not perfect, no more than we are, but we can help it and it can help us, but we must, on both sides, be loyal, frank and courteous.

The Loss Ratio.

The loss ratio, of course, is the burning question. The enor-

mous fire waste of this country is now attracting public attention, and even the secular press is beginning to realize that the destruction of tangible property by fire or any other agency, is at once an annihilation of wealth, touching first the individual, second the community, and third the nation. It matters not that the insurance companies may indemnify the individual, and seemingly restore to the community the lost property values, because the cost of restoration must come from that fund previously deposited by the insuring public with the insurance companies against the day of loss which will surely come to a certain number. In other words, losses are provided for in advance, and when the individual is indemnified the funds on deposit are depleted in the amount paid, plus expenses, and so far as the loss of wealth to the community and nation is concerned it remains just as though neither premium nor indemnity had been paid. For many years the National Board of Fire Underwriters has been gathering statistics concerning the fire waste in this and other countries, and its findings show that the property loss in the United States is between nine and ten times greater than in the countries of Continental Europe. We are contributing to the National ash heap property values to the appalling total of nearly \$250,000,000 per year, and in commenting thereon the President of the National Board very truly said that no country, however rich, could suffer such enormous annihilation of wealth without seriously impairing its prosperity. It seems unnecessary to say that the chief cause of our enormous fire waste may be traced to faulty and fragile construction. Our forests have been so vast, our trees so large and our lumber so cheap that wood has entered into our construction to a preponderate extent, while throughout Europe fire-proof or fire-resisting material is used almost to the exclusion of lumber. Here is where we attain to a bad eminence in comparing the physical hazard.

When in comparison with conditions in foreign countries, we come to "The Moral Hazard," (meaning incompetence, criminal carelessness and criminal intent) the guerdon and the palm are ours. In France there is a law which dates from the time of the first Napoleon, which provides that if a fire starts on your premises and damages or destroys adjoining property, you are responsible to the owner thereof, and vice versa, and on this subject I commend to your attention a paragraph from the able address of United States Manager, E. G. Richards, of the North British & Mercantile Insurance Company, delivered at the last meeting of the Fire Underwriters Association of the Northwest, held in Chicago last October. It is as follows:

"Personally, I favor and consider practicable the enactment of a law which would permit an insurer to collect from his insur-

ers in case of fire originating upon his own premises (except from known cause beyond his control), not more than 50 per cent of his loss; and, if such fire extended to the property of others, whether tenants in the same building or property adjoining or exposed by his premises, that he could then collect from his insurers only such proportion of his own loss as the amount of loss and damage to his own property bore to the loss upon all property involved.

"The law could permit certain exceptions: If, in the case of a mercantile house, manufacturer or other property owner, it could be shown to the authorities that larger protection from insurance was essential, exemption in all or part could be given by special authority, such exemption being listed, published, and kept on file with the police and fire marshal. The enforcement of some such law would reach the primary causes of the larger part of our annual fire loss.

"The passage of better building laws would be easy of accomplishment; the fire marshal would be in large demand; the insurer be certain to see that his building was made safe; that vertical and side openings were effectually protected by approved devices, watchfulness against carelessness of every kind would be vastly increased, and every appliance for extinguishing fires—from the automatic sprinkler to the fire pail—would be brought into service.

"In this country a premium is placed upon carelessness, indifference, and, worse than either, incendiarism, by the lack of thorough investigation into the origin of fires and the ease with which fire insurance is collected after a fire has occurred.

"What reduction from present rates of insurance would you, my fellow officials, be willing to grant for such safeguarding of your interests? Would 30 or 40 per cent be too much? I think not; for I fully believe the fire waste of this country, by the universal application of such restrictive laws, would be reduced to less than one-half of its present total; and a successful test of some such plan by a single State would lead to its adoption by others."

My friends, Mr. Richards is neither a novice nor a flighty theorist, but a mature, conservative and brainy underwriter. His proposed enactment along the lines of the "Recours des Voisins" of our sister republic is worthy of the critical attention of the insurance interests of this country. In nearly all lands, except ours, the owner or occupant of a building in which a fire originates, is at once answerable to public enquiry, and the burden of proof is upon him to show that the fire was not preventable. If charged with crime he has no mountain of technicalities to place between himself and the operation of law. Sufficit to say that the terms "Spontaneous Combustion," "Crossed Wires,"

"Rats and Matches," and the great "Unknown," are difficult to articulate in the foreign tongue. The loss papers of a large office pass through the writer's hands, and he knows whereof he speaks when he says that not one proof in fifty contains a clear, satisfactory statement regarding the origin of the fire. This is a serious condition, but there is a remedy, and that remedy is to apprehend the two men responsible and punish them for their delinquencies. Who are the two men? In answer allow me to quote from the late Edward Atkinson, the man who made a success of the New England Factory Mutuals. He said:

"The only persons who can prevent loss by fire are the owners and occupants of the insured premises. Upon them rests the responsibility for heavy loss, when any occurs, in nearly every fire. So long as this fundamental principle is neglected by owners and occupants of real estate, all charges against cities, underwriters and fire departments are futile and foolish."

Now, how are these two delinquents to be brought to book? Let our inspectors redouble their vigilance. Let them be called in from the grain fields and hop yards and sent into the basements and garrets where the deadly fire-breeding germs lie in wait for our surplus. Let the insured be inspected as well as his property. Nine times out of ten you will find that the owner of a littered basement and a dirty garret is a non-progressive, slovenly, incompetent, unsuccessful man, and a warm friend of Mutual Companies. Leave him to his fate. The only way that the fear of the Lord can be put into his soul is to hold him responsible to his neighbors under some such plan as suggested by Mr. Richards. Then let us compel him to share with us under an agreed co-insurance clause the liability involved in the risk. Restrictions such as these have no terror for the honest, alert, up-to-date business man, but they will bring your dishonest, slovenly, back-number up to taw with a sudden jerk, and in due time our criminal fire waste, our enormous loss ratio, and our unnecessarily high cost of fire insurance will be reduced to the minimum.

The Expense Account.

The expense ratio, like its sister iniquity, the loss ratio, is also having an evil and unhealthy growth. Not only are State Legislatures and municipal corporations, through ignorance and maliciousness, yearly adding to the burdens, but there is an insidious and growing tendency on the part of Managers and Special Agents to corrupt the local agents by the meanest, if not the cheapest kind of bribery, the cost of which follows the expense line like the trail of the serpent, which, we are told, is over us all. Our largesses to agents now include nearly everything from pin-cushions to automobiles. Our honest penny postage is taking on the rotundity of the silver dollar, and we will probably

see our finish when the cost of exchange exceeds the premium draft. That Special Agent down South (I never learned his or his Company's name), who offered to bet the local agent \$100 (and put the money up in the agent's own hands) that he (the agent) would not produce \$1000 in premiums within a stated time, was probably not gambling away his salary; but the same results could have been obtained more honorably if he had written on the fly leaf of the register the fact that his Company paid 10 per cent excess commission in spite of Board rules or a gentleman's agreement. Men and brethren, if 15 per cent is not sufficient compensation for the agent let us boost it. Let us make it big enough to carry everything—postage, exchange, jewelry, clothing, typewriters, theaters, prize fights, and automobiles. Let us pay the price, but for heaven's sake and for the sake of our own self-respect, let us abolish the petty larceny grafting we have educated and encouraged the local agent to indulge in; and while we are adjusting commissions let us make them uniform. If business in Seattle, Spokane and Tacoma is worth only 15 per cent, it is certainly worth no more in Portland, Oakland, San Francisco and Los Angeles. All this unnecessary loading, amounting in the aggregate to an enormous sum, necessarily becomes an important factor in fixing upon the insuring public an excessive premium rate, and the punishment for our dishonesty is promptly meted out to us by an unfriendly public opinion in which is germinated the freak and drastic legislation which finds its way into our statute books. A very considerable reduction in the expense account could be obtained

If Special Agents would discourage or decapitate predatory local agents;

If weak-kneed managers would stand the gaff and avoid the graft;

If we could develop the man and exterminate the hog;

If we had more faith in each other.

Co-Insurance.

Theoretically, full co-insurance should be required in all policies; but in practice the insured should carry part of the risk to induce care and protection on his part, preventing the moral hazard attaching to property fully insured. The 100 per cent co-insurance clause is frequently used on blanket policies in lieu of the average clause, and it is an interesting problem to show that full co-insurance covers all the requirements of the average clause, but that the average clause has none of the requisites of co-insurance. An effort is now being made to write blanket policies with the 90 per cent co-insurance clause, with sometimes the 5 per cent redemption clause attached. Neither should be permitted except on self-contained, or single risks. The reason is obvious when we consider blanket forms

on pianos, billiard tables, street cars, etc., covering in numerous locations.

Two factors should be the foundation for reduction in rates for co-insurance applying to buildings—protection and construction; and with these in mind the application of co-insurance might be considerably enlarged. Towns with inferior fire departments might receive small reductions for co-insurance; and buildings of first-class construction be entitled to greater credits than are now allowed. Stocks should be treated on their individual merits according to their susceptibility to damage. The present system of granting the same reductions for all classes of stocks,—drugs or pig iron, millinery or tombstones,—seems fallacious.

Insurance Institute.

The highly satisfactory results attained at the initial session of our institute in 1905 are well known to us all. The venture proved to be more than self-supporting, while the attendance at, and the interest displayed in the lectures by the young members, exceeded our fondest expectations. But unfortunately, this good work was interrupted by the calamity of the following year, and up to the present time it has not been resumed. We are now "getting out of the woods," however, and I am therefore impelled to urgently appeal to the members of the Association to take the necessary steps at this meeting to place the Institute on its feet again, holding in view the object of maintaining the organization permanently with annual sessions. You will doubtless be interested in knowing that since the formation of ours, four other institutes have been organized abroad, viz.: The Insurance Society of Cardiff, The Belfast Insurance Institute, The Insurance Institute of Liverpool and The Insurance Institute of London. At home we have the new Insurance Institute of Hartford formed during the year just closed. Since the founding of the Pioneer Institute of the world in 1873—The Insurance Institute of Manchester, England—twenty-one others have come into existence, including the new one at Hartford and our own, these being the only two in our own country. This is a poor showing for the United States in comparison with foreign countries, and it forcibly presents a sad commentary upon the domestic educational system as applied to our business. Such an unfavorable showing should stimulate the members of this Association to renewed activity in the building up of our institute to a standard of excellence in keeping with our position in the insurance world. In this connection I suggest the advisability of taking into consideration the broadening of the scope of our work by admitting those engaged in insurance work other than fire, following in this respect the plans of the new Hartford Institute. Finally let us take up the work with a will where we

left off, with the avowed purpose of carrying it to a successful conclusion.

The Library.

I am pleased to report to you that our library has been largely restored, indexed and cross-indexed, and though not so extensive, it is probably better selected than the old one. We are under a great debt of gratitude to our most efficient, painstaking and underpaid librarian, Mr. J. P. Moore, who has drawn upon every insurance center in the world for the valuable literature which now fills our shelves. There is nothing further that I would wish to add to his interesting report which you have listened to, except to suggest a means of financing this excellent and necessary institution. It must be admitted that members of the Association not living in San Francisco have but little opportunity to avail themselves of the benefit of the library, though a considerable part of their dues goes towards its support. This is a mild form of taxation without representation, a doctrine which in the early history of this country was considered very reprehensible. If the Managers, Special Agents, Adjusters, clerks, lawyers and Board employees resident here have all the benefits of the library, they should foot the bills. The Board this year set apart a comfortable room for library purposes, and just as we were congratulating ourselves on having a place where we could go to quietly study out the perplexing questions constantly arising, we found a joker in the generosity, in that the room was to be occupied by Board clerks when necessary, and the necessity seems to be an almost continuous performance. In addition to this discomfort, the use of the room has been kindly donated to a Plate Glass Organization for its weekly meetings, and I am told that a look in on the sessions of that institution suggests "smoked" glass rather than plate glass. Hence the great value of the library is practically negated even to those who have the opportunity and the inclination to keep in touch with the thought and practice of the business the world over. Two methods of rescuing the library from its present dependent and indigent condition suggest themselves. First, on reorganizing our Insurance Institute, to present to it this valuable property clear and free of debt, on condition that it be maintained along lines to be agreed upon. Or, second, that it be made a living and active component of the Board of Underwriters and its expenses assumed and charged to the Companies in the usual way. I am told that this would be a violation of the Board constitution, but if we can change the constitution of the United States occasionally, and violate it the rest of the time, we can surely arrange a small change in the Board constitution, in order to provide for this meritorious institution. I earnestly urge the Association to take the matter up and make some disposition of it at this time.

The Maps.

A subject which is of unusual interest to Managers, Specials and Local Agents is the mapping of cities and towns. It is unnecessary to point out that this important branch of the business is now in the hands of an Eastern monopoly known as the Sanborn Map Company, and although a branch department is maintained in this city it must be conceded that the service given is very slow, expensive and generally unsatisfactory, particularly in so far as the smaller towns are concerned. For some time past the Special Agents covering the State of Washington have been discussing this question, and a three-cornered correspondence between R. P. Fabj, of Seattle, John Marshall Jr., of Chicago and Walter I. Fisher, of Minneapolis, has developed some very interesting data. On the coast here we may pass Messrs. Fabj and Marshall without introduction, but will say for Mr. Fisher that he is the manager of the General Inspection Company, covering the States of Minnesota and the two Dakotas. His office will correspond to the Seattle office, managed by Mr. Lee McKenzie, being a stamping and rating bureau, to which has been added a mapping department. The meat of the correspondence referred to is contained in Mr. Fisher's interesting letter of November 17, 1908, which by his kind permission I take great pleasure in reading to you:

Minneapolis, Minn., November 17, 1908.

Mr. Robert P. Fabj, Colman Building, Seattle, Wash.

My Dear Sir:—Your esteemed, favor of the 3d to our mutual friend, John Marshall Jr. of Chicago, has been turned over to the writer with a special request that I give you what information I can along the lines you indicate, and it affords me great pleasure and also the honor to say that the writer took up the question of map making some seven or eight years ago, and we had last January our own published maps for 640 towns located in Minnesota, North and South Dakota. This does not include a great many maps of special hazards, etc.

Our maps range all the way from one page to seven pages, and it does not make any difference to us what the size of the town is; and if the companies ever get to their senses and permit us to make a map of the larger cities we can beat the Sanborn Map Co. two to one in the question of expense and in corrections and also accuracy.

Inasmuch as you are looking for information and that I personally saw Mr. Marshall last Friday in Chicago, I am going to tell you something that I do not usually let out, and that is, that in all this map work for seven or eight years we have only charged the companies 75 cents a sheet and that the actual cost of the printing is about 30 cents a sheet. We sell these maps at 75c a sheet and in addition we keep them corrected

from time to time as the new buildings or changes are reported. This price of 75 cents takes care of all the changes and corrections or until such time as the town is resurveyed and re-mapped. It is not intended that we would make any profit on this and the charge to companies was merely to take care of the original printing and the miscellaneous work to keep them up from month to month. Our map account stands about \$150 ahead so that I know we are working along safe lines and the mapping is not an expensive feature, but is practically self-supporting.

It is our rule to map every town and every risk of any particular consequence unless the Sanborn people have already got a map, in that case we have to keep hands off because of the chances of treading on somebody else's toes. We require our inspectors to do this mapping while on the ground making a re-rating of the town. This practically compels them to go over the town twice and it insures correctness not only in the inspection so far as rates are concerned but also as regards the map.

I am sending you an original map as made in the field by one of our inspectors. This map goes to Chicago where it is duplicated in any number we may order. The printer in Chicago simply duplicates what we send him and sends us, we will say, 50 or 60 copies, sometimes even a hundred. When they are received by express they are then mailed to each company represented in the town as well as to each agent, and the surplus is kept for future orders and for those that go astray, get lost or are stolen. I am also sending you some samples of our work. The various names you will note on these maps do not mean anything in particular.

Until the first of July I have been Secretary of the State Board, which is composed, of course, of the State and special agents of the various companies, but in July I had to resign after having served as their Secretary for fourteen years. The companies have made quite an important change in this field and put all of the three States, including the cities, on to the writer so that now I am doing business under the name of the General Inspection Co., but as a matter of fact it is an individual and independent matter. The premium receipts I am now looking after are just about an even ten million. The stuff I am sending you will, however, give you a very fair idea of how we do things and if this letter should prompt you to ask any further questions in the premises I am at your service.

Yours very respectfully
(Signed)

WALTER I. FISHER.

Mr. Marshall, in a letter to Mr. Fabj, under date of November 10, says: "I cannot speak too highly of Mr. Fisher. We (the

Fireman's Fund) are represented in Minnesota, North and South Dakota in almost every town of any consequence, and I think it safe to say that in this office we are using his maps in 75 per cent of our agencies. It is simply impossible for the Sanborn Map Company to keep up with this work. They have too large a field to cover and enjoy too great a monopoly to bother with small towns," etc., etc. Mr. Marshall here puts his finger on the sore spot—the smaller towns, and the ache seems to be the same in his field as in ours, except that they are finding a remedy in the progressiveness of such men as Mr. Fisher. We so often find in the smaller towns, agents with a limited knowledge of those ancient instruments of torture, Rate Books 3 and 4, that confusion and inaccuracies in rates are the rule rather than the exception. This condition would, in a great measure, be overcome if all towns sufficiently large to justify the publishing of maps were specially rated, the tariff or schedule being applied as necessity demanded. Here is where the attractive features of having maps published by the rating bureaus confront us, as they are made by the regular surveyors, who, of course, are thoroughly conversant with tariff and schedule ratings, and as both maps and ratings would be worked out at the same time and corrected yearly, if necessary, you will readily appreciate the boon such an arrangement would be to the small town agent and the incentive to personal righteousness it would suggest to the agency department clerks in our central offices. In addition, it would prevent the city agent from handing to us a small town risk with a faulty diagram and an inadequate rate, all made up from information and belief, as so often happens. It would give our examiners in the rating bureaus complete information from the smaller towns, now so sadly lacking, relieving them of volumes of correspondence and misunderstanding with the local agents and the department offices. More surveyors, of course, would be required, but if the mapping department can be made self-sustaining in Minnesota and the Dakotas, is there any reason why it could not be put upon the same basis on this Coast? Is the departure worthy of a trial? If so, why not try it out, say in the State of Washington, which is to the Pacific Coast what New Zealand is to the British Empire—a place where they try things, and, incidentally, where they do things. * * *

* * * At the dawn of civilization fire was both feared and worshipped—the terms being in a measure co-relative. Our uncouth progenitors, needing neither artificial light nor heat, naturally feared this element whose only agency seemed to be that of destruction. But as mankind increased numerically and began to scatter to countries of lower temperature, we may safely theorize that, huddling together for shelter from the cold, they thought more kindly of that unknown quantity which so terrorized them in their old homes in the torrid zone. Then by accident or inspira-

tion, or the possible discovery of volcanic conditions, they were again brought in touch with it. But the heat warmed their chilled bodies, and with the absorption of comfort, fear, to a certain extent disappeared; and by the application of heat to practical use the real impetus to civilization began. These few speculations cover an immense period of time. Fire is still a destructive agency, but its uses to mankind are entirely beyond calculation. It is now, however, a question of serious thought with the speculative and scientific mind if we are not approaching the end of what might be termed the combustion age, in so far as human necessity is concerned, and entering upon the electric age. The general use of electricity is within the memory of most of us, and what seems marvellous today may in a few years be looked back upon as having been very crude. Thunder and lightning storms, and the frequent destruction wrought by them, were, not so very long ago, believed to be the voicings of a displeased Providence; but we are finding causes for all effects, and as we are gathering the lightning from the clouds and putting it to practical use, so are we taking fear from the souls of men. Is it too great a leap of imagination to speculate on the possibility of abandoning the combustible constituents of the earth as necessary to the comfort and progress of the race? The theory is not now seriously disputed that all space, infinite and entirely beyond the grasp of mortal mind, is one immense storehouse of the elements of that intangible, invisible, terrific and serviceable something we call electricity. Already it has surpassed all other agencies as a medium of light and power, and as a generator of heat it has begun its conquering reign. How long will it be before every building, railway train, ocean liner, automobile and airship will be equipped with wireless receivers, through which will be received heat, light and power? As the necessity for the lamp, the stove and the furnace disappears, will not the fire hazard be minimized? The man on whose premises a fire starts will be in the same class as the drunken chauffeur who runs down a child in the street. He will be locked up and his property confiscated to indemnify adjoining property-owners who may have suffered loss on account of his delinquency. The last enemy to be destroyed will be the smoker. He will be tagged, numbered and placed in a restricted district; or, possibly, the entire fire waste will be paid for by a tax on the tobacco trust. If, indeed, we are approaching an age when it will not be necessary to use combustible solids for light, heat and power, as our scientific experiments suggest, the great change will take place within the next fifty years, and fire insurance, as conducted today, will have passed, with the conditions which sustained it, to the limbo of useless things. But while there is work to do and our occupation lasts, let us give to our profession and to our employers our very best endeavor; and we will all be bigger men and

better men if we can with sincerity daily re-echo the great prayer of Tiny Tim, "God bless us all."

Gentlemen, I thank you. (Applause.)

The President: Now, gentlemen, the first paper on the programme is a very important one, and I wish to request that all the members who can possibly do so remain. It is a very instructive paper, and we have time to hear it read before the dinner hour. I will now call upon Mr. William Sexton for his paper upon the "Too High Cost of Fire Insurance."

Mr. Sexton: When I announced the title of my paper, someone came to me and said, "Too High Cost of Fire Insurance! Does that mean local or special agents' commission, or salaries of the special agents? Does it mean the manager's salaries, or adjusters' salaries?" I answered, "No." I changed the title to read: "The Too Low Rate of Fire Insurance for the Company and the Too High Cost of Fire Insurance to the People, and why?" That is the heading, and this is the story:

**THE "TOO LOW RATES OF FIRE INSURANCE FOR THE COMPANIES." WHY?
THE "TOO HIGH COST OF FIRE INSURANCE TO THE PEOPLE." WHY?**

By Wm. Sexton.

That fire insurance rates are too low will be admitted by any fair-minded student of Fire Insurance statistics based on experience to date.

Wielders of the pen, who contribute the product of active brain and vivid imagination to the instruction of the public, establish beyond the question of a doubt that fire insurance rates are exorbitant, and that the profits are so great that the reader is at a loss to decide whether such profits are based on legitimate percentage, or on simple robbery.

On the other side of the question, when the would-be promoter of a Fire Insurance Company of \$1,000,000 capital and \$1,000,000 surplus submits these rainbow statements to the wielder of the pencil, whose financially trained brain looks for actual profits and not to rainbow promises to follow the investment of his coin, he wants to know what the chances of profit are; he takes out his stub pencil, puts the would-be promoter through an examination, and learns:

That the capital and surplus of the new company must be fully paid up in coin within one year and that subscribed capital on call will not do;

That in addition to the capital and funds of the company the

stockholders are held, under the California laws, liable for pro rata share of all claims not met by the capital and other funds;

That on the first year premiums of say \$500,000, about 18 per cent, or \$90,000, is absorbed by agents' commissions and local office expenses;

That if the risks are all written for one year, 50 per cent, or \$250,000, must be carried over for the legal re-insurance reserve;

The home office expenses will be 17 per cent, or \$85,000;

This makes a total of \$445,000 out of \$500,000 to be accounted for, leaving \$55,000 to apply to current losses, the balance of the losses for the year to be paid from the surplus fund;

That there will be no earned profit for the first year, but that with a \$250,000 re-insurance reserve for the second year, a profit in the second year should be made.

This statement and illustration of what may be looked for should not discourage investors, but the fact that the people of San Francisco received about \$180,000,000 in gold coin for losses in 1906, and did not organize an insurance company, indicates a want of faith in the figures made by the man with the active brain and the vivid imagination, and confirms their belief in the "too low rates of fire insurance for the companies."

Profits of underwriting for twenty years were paid out on the San Francisco earthquake fire.

The dividends to the stockholders of the leading American companies for many years have been paid from interest earnings, and the underwriting trade profits, with a balance from interest earnings, were carried into the surplus fund.

That the present rates are not giving a profit that will build up another surplus fund to meet the conflagration loss that is due from New York, Boston, Chicago, St. Louis, or other big city, when a shake will break the water pipes, or in the territory west of Van Ness avenue, where we reduced the rates because of the promised Hetch-Hetchy and the salt water supply, confirms the fact of the "too low rates of fire insurance for the companies."

The fire loss caused by the late quake in Italy, which will not mulct the fire insurance companies in that country as it would if in the United States, is a notice of what might happen in this country, where we had the Charleston quake, the Mississippi Valley quake, a quake in Montana a short time since, and two sharp temblors in San Francisco in December.

The Charleston and the big Mississippi Valley quakes and the San Juan Capistrano big quake were in the days when there was no hell fire to be let loose in building ruins from crossed electric wires, as in the big San Francisco quake; and that the insurance companies are not now building up a good surplus

with which to meet such a loss is because of the "too low rate of fire insurance for the companies."

The ratepayer who grumbles because the companies insist on charging more than his risk is worth, based on the current losses for the current year, and the jelly-backed underwriter who backs him up, are always among the first to jump on the company when the unlooked for (should be always looked for and prepared for) conflagration swoops down and wipes the company off the face of the earth.

It is the business of the underwriter to lay up a surplus for the hot time that will come and turn a deaf ear to the agent and to the client who wants him to write at a "too low rate of fire insurance for the companies."

The annual loss by fire in the United States exceeds the total value of the product of gold, silver, copper and a few other minerals.

The fire waste with cost of fire protection, making a total of not less than four hundred and fifty millions of dollars per annum, carrying with it an insurance loss of over two hundred millions, accounts for the "too high cost of fire insurance to the people."

This fire waste can be traced to flimsy buildings; want of care and cleanliness; improper policing; carelessness in making and carrying out insurance contracts; exorbitant fees and taxes; unfriendly legislation, and antagonistic juries and courts, all of which furnish the "why" of "too high cost of fire insurance to the people."

Flimsy Buildings.

Our buildings are generally of frame construction, built on the most economical plans; draft spaces between studding, between floor and ceiling joists, to save materials and labor, and to make a fire as destructive as possible.

The chimneys are one brick in thickness, laid in mortar made of alluvial sand about as sharp as mud; and this mortar is about as good as flour dough. A joist or a rafter in the way of the flue is usually built in with the chimney to save work; where chimneys are too costly, the "terra cotta flue" that cracks on the outside from the expansion of the heat on the inside, that granulates on the outside when heated by the sun when cool on the inside, or cracks off where it passes through the roof, takes the place of the brick flue.

The next makeshift is the stovepipe through the roof, giving to a country town the appearance of a Mississippi River steamboat levee.

This class of smoke-drawers as compared with the old-time chimney, built two bricks in thickness, with honest mortar,

accounts for much of the "too high cost of fire insurance to the people."

Ordinary brick buildings contain a forest of timber, studding joists and partitions, with the draft spaces as in the frame buildings.

The "A" Class building, with its wooden windows and wooden doors and wooden windows and door frames, and sometimes partly sided up with lumber or with terra cotta to save weight, are not by any means fireproof.

The ten or twenty story skyscraper in a five or ten story fire department city, furnishes a non-fire department fire hazard on the floors above the reach of the fire department and adds to the "too high cost of fire insurance to the people."

The cotton-lined, stove-piped, hurry-up structures, veritable tinder boxes, furnish kindling wood to burn the better buildings, and help to swell the "too high cost of fire insurance to the people."

The electric wiring run in between floor joists, between studding, hidden away in the garret, in the basement, anywhere out of sight, to make a neat, smooth, scientific installment, and to allow the fire, that in ten or twenty years will occur from wear caused by a little bit of damp on the wires, or by time and use, to get a start before it shows itself, insures a total loss.

Common-sense wiring should be applied and all wires placed in plain sight or in slight grooves in the walls and ceilings, with thin covering painted to correspond in color with the walls or ceilings to make a neat finish, and where the smallest flash caused by electric disturbance would show itself, as does a fire from a gas jet, from a waste paper basket or from a lamp or other exposed cause.

The change from scientific to common-sense wiring would deduct many dollars from the present "too high cost of fire insurance to the people."

Buildings in the other countries are fireproof and fire-resisting, the cost of the fire insurance is not "too high," and a rate of one-tenth of the American rate pays a good profit to the insurance companies.

Carelessness.

Carelessness in making and in carrying out the insurance contract:

The insurance contract is too often made on the amount of the premium instead of on the amount of and on the wording of the policy. There seems to be a competition between agents to permit applicants for insurance to name the rate, and between managers to permit the broker to make the forms, which forms frequently carry a rate based on "watchman," "watch clock," "sprinkler," "clear space" and other hazard-reducing

warranties, nullified by "will use due diligence," or by the Court deciding that "Permission granted for the above described works to remain idle, it being warranted by the assured that at all times when the above works are idle or 'inoperative' one or more watchmen shall be constantly on duty at night," means that works that are operated during the day and are shut down at night are not "inoperative" at night, and that this clause does not require a watchman at night.

With the modifications of the rate-reducing warrantee clauses by the company, and liberal interpretation of same by the courts, watchmen can sleep, watch clocks can be laid on the shelf and sprinklers may be dismantled; but the insured need not worry, the policy will be wide awake, alive and on hand to cover the loss, and to build up the "too high cost of fire insurance for the people."

The too low rates obtained by sharp practices and the great losses occasioned by unpunishable criminal carelessness and negligence, all charged up in the average rate on good and not good property, are big factors in the "too high cost of fire insurance to the people."

The blanket forms covering everything owned, and or not owned by the insured; the permits for other insurance without regard to the value of the property or the character of the applicant; the adjustment of the claim, not adjustment of the loss and not on actual cash value of the property at the time of the fire, but at what it was insured for under the policies issued by various companies without notice of or permit for "other insurance," except as printed in the form, leads to excess payments which swell the "too high cost of fire insurance to the people."

Fire Departments.

Fire Departments consist of water supply, engine, hose and other equipment, and men, and of these the most important is the man.

The political Fire Chief, who comes in with the new administration, holds during the term, gets some experience at the expense of the people, and retires to make way for the next new man, is one of the weakest factors in the Fire Department, and furnishes its share of the "too high cost of fire insurance to the people."

The Fire Chief should, like a ship captain, grow up in the business, and should have an experience in every class of condition that could occur when and after the fire starts, and should, like the captain, be ready with his mechanically trained mind to decide and give an order without waiting to think it out.

An ordinary man can fill the office of Mayor, Chief of Police, Sheriff or other public political office, where there is time to

consider a situation and to take advice when needed, but the Fire Chief, as said above, has no time to consult, to think or to get advice, and must be mind-trained in advance.

The water supply and the equipment are important, but the Chief, the man behind the gun, is the most important of all; he, if he knows his business, knows that the equipment is for the purpose of putting out fires, and that a half minute and ten gallons of water at the inception of a fire is worth hours and the Pacific Ocean, when the fire gets out of the block and starts going four ways at once.

The Political Fire Chief.

The political Fire Chief too often throws tons of water into the smoke on the upper floors, making a bad or a total loss on stocks, while the fire is suffering in the basement for want of attention, as the late Geo. F. Grant put it in a report on this class of Fire Chief loss, and this adds to the "too high cost of fire insurance to the people."

An insurance journal states that the Fire Chief admitted that during the recent big conflagration in New Orleans, that after the general alarm had been sounded a race between two engines at the Fair Grounds, which had been extensively advertised, was run off "so as not to disappoint the crowd," and this helped to pile up the "the too high cost of fire insurance."

The adjusters' report on a recent fire in a California city states that the new political Chief and his assistant did not know where the chemical engine was kept, with which a 5 o'clock fire on a summer morning could have been squelched with but small loss; result, a total insurance loss of ten thousand or so, and this helped to swell the "too high cost of fire insurance to the people."

Bad streets and faulty signal alarms also help out the record of big losses that should not happen at all, all of which goes into the loss pool, costing the people much money, preventing insurance companies from making profit, and is another factor in the "too high cost of fire insurance to the people."

Too many people have an idea that Fire Departments are supported by the public for the benefit of fire insurance companies, which idea is based on the interest that underwriters take in Fire Department legislation. This idea is strengthened by the fact that San Francisco Underwriters lobbied a bill through the Legislature levying a tax on San Francisco premiums to support an auxiliary Fire Department in San Francisco; and, having performed this good service for the non-insuring or underinsured people of San Francisco, at the expense of the premium papers, they, the underwriters, confirm the idea of the multitude, as expressed above, and they want similar provisions for other good cities on the Coast, to add more to the "too high cost of fire insurance to the people."

Cleanliness and Policing.

The many fires caused by criminal carelessness in storing old boxes, waste paper and other trash in rear sheds and in back yards; by having open grates into basements under sidewalks, through which paper drops and the live cigar or cigarette stub follows; keeping sawdust in spittoons in public places to catch the burned-out (sometimes) match; or under the linseed oil drip to produce spontaneous combustion; the omnipresent cigarette, where "No Smoking" signs abound, which, when the footsteps of the boss are heard or his shadow seen, is promptly tucked under the bench or the counter, and sometimes, but not always, missing the waste paper or other inflammable trap set for it, cause many fires that could with ordinary care be avoided, and **that** fruitful factor—carelessness—be eliminated from the many causes of "too high cost of fire insurance to the people."

In other countries when a fire occurs and property is destroyed, the act is looked upon as a criminal waste of property, and not, as with us, a Godsend like the old-time shipwrecks on the Florida Keys, to the people who are suffering for the other man's money, and, as the wreckers on the Keys were charged with putting out false lights to lure ships to destruction, it is quite possible that fires are sometimes promoted with gasoline.

A fire on a man's premises in Europe must be accounted for by the occupant, and in our neighboring country, Mexico, a fire loss results in the insured being placed incommunicado, and the authorities, when he proves his innocence, adjusts his loss, with the result that the cost of insurance in that country is less than one-half of what it is with us and the insurance profit greater.

More accountability on the part of the loss claimants, and less assistance rendered them by the laws, the juries and the courts in collecting shady losses, would in this country reduce to the Mexican level our "too high cost of fire insurance to the people."

Policing.

When all of the circumstances of an unaccounted for fire, such as run-down stock, over-mortgaged property, slack business, unrented not-paying buildings, point to arson, the least hint of arson from the adjuster is met by the people with the reply: "Well, if he burned the property, send him to prison." And as arson when successful destroys all of the evidence of the fact that the property was burned intentionally, and the crime of arson committed, the State's Attorney finds himself unable to establish the fact that the crime of arson had been committed, and consequently there is no basis on which to introduce circumstantial evidence to connect anyone with a crime that had not been proven to the Court as having been committed.

The State's Attorney, when prosecuting a party for the crime of murder, larceny or other crime, except successful arson, can first establish, in a murder case, the fact that the crime of murder was committed by testimony that a human being was found dead, and that the death was caused by poison, shooting, stabbing, or other causes, and was not a natural death; or, in a case of larceny, he establishes the fact that the property was removed from the possession of the rightful owner by human means; and, having established the fact to the Court and jury that a crime had been committed, he then introduces circumstantial evidence to connect the party on trial with the commission of the crime.

The impossibility of establishing the fact by an inquest that the totally destroyed burned property was the result of arson, when an insurance man who could tell of fires started with rats gnawing matches, rats gnawing electric wiring covering, electric light bulbs on, or in beds, in show windows or on goods in store basements, faults in window glass, spontaneous combustion of wet wool, wet hay, oil silk and oil rags, of lamp explosions when lamps are turned down for safety, and the numerous and many other causes of fires, would be a star witness for the defense, absolutely precludes a company from defending on the grounds of arson, regardless of what the circumstantial evidence may be.

In many cases of direct testimony, where one or two witnesses saw the defendant set the fire and three or more witnesses testified that they did not see crime committed, the jury were satisfied that a preponderance of testimony was in favor of the defendant and very promptly convicted the company.

The result of this experience is, that in such cases a technical defense, when one exists, is interposed, and if there be no technical defense the best settlement possible is made. The result confirms the views of a large class of people who believe that taking advantage of the Government or of a corporation is a smart financial transaction, and not a crime; but, nevertheless, protected arson cuts a big figure in building up the "too high cost of fire insurance to the people."

If the losses by arson were confined to the property of the people who commit arson, the mischief would not be so bad, but whole blocks and whole towns are burned by a \$500 policy-holder firebug, whose stock had been sold down from \$1000 to \$100 and the books burned; and losses of thousands and hundreds of thousands are sustained by innocent, honest people and paid by insurance companies that a poor man may secure \$500 from the bloated corporation, and this accounts for a good share of the "too high cost of fire insurance to the people."

Unfriendly Legislation.

Much of the "too high cost of fire insurance to the people" can be charged to well meant mischievous legislation.

The Legislator, who may not be an experienced business man, and who has not had direct dealings with the insurance companies, deems it to be his honest duty to regulate the companies, and having had a neighbor who failed to receive the face of his policy, \$1000 in coin, for fire loss on a building that when built cost \$1500, but at the time of the fire could be replaced new for \$800, and having the decision of the United States Court in mind which approved the decision of a State Court on the Valued Policy Law, wherein the State Court said, "The company * * having the opportunity to inspect fully before insuring and then fixing the amount of the risk, and receiving the premium based upon such valuation, ought to be forever estopped, in case of a total loss, from denying the valuation agreed upon," immediately introduces a valued policy law, which, if passed, assists the dishonest man to sell his property to the insurance company at a profit, which profit is collected from the premium-payers, and is one of the many causes of the "too high cost of fire insurance to the people."

A sample of would-be legislation: A Senator from Dutch Flat, about thirty years ago, a most estimable and honest man, introduced, by request, a bill providing that in case of a suit against a fire insurance company the company should deposit the amount sued for in court and that the claimant, by furnishing a bond with two personal sureties—this was before surety companies were in fashion—could draw the money, and if the company won the suit it could recover from the sureties; the bill was withdrawn, probably because the gentleman at whose request it was introduced had made peace with the lobby representative of the insurance companies.

This class of lawmakers add their quota to the "too high cost of fire insurance to the people."

Many of the States have State standard policy forms, all of them, except the New York standard form, intended to cinch the insurance companies, and all of them, except the New York form, adding to the "too high cost of fire insurance to the people."

One of the States has a complete, from the lawmakers' point of view, form, which provides that no indorsement thereon shall be permitted.

The Insurance Commissioner of that State holds that the clear space lumber yard saw mill clause is illegal; the result is, that where the mill owner, who paid six per cent on his mill and two per cent on his lumber under the 200 feet clear space clause, must now pay the mill rate, six per cent on the mill

and lumber, and add to the already "too high cost of fire insurance to the people."

Another decision is that the "average clause" cannot be used. This decision forces a man who has property in two or more locations, where the value is changing from one location to another, and where under the average clause the insurance would float with the changes of values, to make specific insurance in each location, to be safe to cover the highest value that he would probably have in either location during the life of his policy, thus adding to the "too high cost of fire insurance to the people."

There are a number of other decisions under that policy form that instead of cinching the companies, as intended, are boomerang-like, and all of them adding to the "too high cost of fire insurance to the people."

The last California Legislature passed a Standard Policy form bill that, in the language of the street, was a dandy. It could have been worshipped, as there was nothing like it on the face of the earth, but fortunately for the people, the Governor, who combines a good knowledge of law with a large practical business experience, which enabled him to detect the difference between a policy form that is the outgrowth of two or three hundred years dealings between underwriters and property-owners, which had been tested and passed upon by the courts, is satisfactory to the bankers, the big corporation, the merchants and to the people who carry thousands of millions of dollars insurance, and a form that was the spasmodic, hysterical product of underwriting ignorance and an earthquake, decided against the latter, thus preventing another addition to the "too high cost of fire insurance to the people."

The arbitrary laws providing for five per cent to six per cent taxes on income, imposing extra taxes on people who insure, and making the insurance companies tax collectors, add that much, with the cost of collecting, to the "too high cost of fire insurance to the people."

There is no other business that is taxed to that extent, but as the ratepayer has to stand it, he may some day wake up and discover why the "too high cost of fire insurance to the people."

The laws fixing an arbitrary per cent of the premium to provide for the reinsurance reserve, regardless of the fact that one company may be writing at one dollar rates and another company writing at fifty cent rates, the former under the law carrying forward fifty cents and the latter twenty-five cents, is one of the beauties of our American automatic machine methods of doing business.

The English system, that allows the managers of the companies to make their own estimates of reinsurance reserve, is much more businesslike, and in the big earthquake fire was very valuable to English companies and to the people of San Fran-

cisco in permitting managers in England to use their own assets as they pleased to furnish ready money to pay their losses, and to carry forward whatever sums for reinsurance reserve that good business judgment would warrant. Their policies are as good as are the policies of American companies, whose assets and business methods are hampered with all kinds of Legislative supervising restrictions.

Juries and Courts.

In ordinary business juries and courts can be depended on to do what is fair between man and man, but in insurance suits the proverbial cat in hell without claws has a picnic compared to an insurance company before a jury or before the average court.

This conclusion is reached from experience and can only be accounted for on the ground that jurors are always against corporations; Judges are taken from the bar, and as there is not enough insurance litigation to educate attorneys in insurance law or practice, not one in fifty has any experience in that line, and the Judge goes on the bench with only the crossroad grocery club member's idea of indemnity. This was well illustrated in a case wherein the valued policy law was contested, where the learned Judge, instead of following the reasoning of indemnity for actual loss, and the arguments and decisions of English and American courts on the principles of indemnity and the evils of wager insurance, very promptly held that as the claimant "paid the premium for a certain sum, that the company should pay such sum when the property was a total loss." This decision was given regardless of the value of the property, the cost of replacement or the amount of the claimant's loss.

In a recent case in California, where the insurance company based its defense on false swearing by the claimant, in this, that he said in his statement of loss that his building had a two-inch floor, containing 9200 feet of lumber, while the testimony admitted by the claimant and the Court proved that the floor was a dirt floor.

The Court said: "Wilfully false statements in the proof of loss under a fire insurance policy avoid the policy when the policy so provides, but the untrue statements, in order to have this effect, must have been knowingly and intentionally made by the insured, with knowledge of their falsity and with the intention of defrauding the company."

"As to the proof of loss, it is admitted by respondents (claimant) that the statement was erroneous as to the mortgage and also as to the two-inch flooring. If wilfully false it would avoid the policy X X."

"But it is well established that the untrue statement in order to avoid the policy must have been knowingly and intentionally

made by the insured, with the knowledge of its falsity and with the intention of defrauding the company."

The Court found that the claimant did not know that his claim for a two-inch plank floor in a building that he built and occupied for four or five years was knowingly and intentionally false, although the value of that plank floor might have been needed to make the loss equal to the face of the policy; the verdict of the jury was affirmed by the Court, and the Court forced the company to pay for that 9200 feet of lumber and the labor thereon, that was admitted by the claimant and the Court as not burned.

There are numerous decisions that a false statement and a claimant, based on his judgment or on his belief, does not void a policy, but this is the first case that we can find in the books where a false claim for loss of property that the claimant did not have, and could not help knowing that he did not have, that has been excused and the claim allowed, on the ground "that the untrue statement in order to avoid the policy must have been knowingly and intentionally made by the insured with the knowledge of its falsity and with the intention of defrauding the company."

This class of, to say the least, liberal construction of the insurance contract to cover and pay for property that the claimant admitted and the Court decided that he did not have, adds very much to the "too high cost of fire insurance to the people."

Another new decision by a State Supreme Court holds that a claimant need not make and present the sworn statement of loss within sixty days from date of the fire, as provided for in the policy, that at any time within the twelve months provided for in which to commence suit will do.

The sixty-day limit has been held by the courts heretofore to be good, for the reason that it is so provided for in the policy; and, further, that the claim should be made within that time, that the representative of the company might have an opportunity to examine the wreck before all of the evidences of the loss to and the remains of the property had time to disappear.

Under this new interpretation of the contract an enterprising policy-holder can lay low and keep quiet until he can present his claim without fear of being caught in making a mistake, and can then swear that he did not make a false claim by mistake, and this furnishes another factor in the "too high cost of fire insurance to the people."

In a case contesting the Valued Policy Law, where a barn claimed by the insurance company to be worth not more than one hundred dollars was insured for eight hundred dollars, the State Supreme Court said: "The learned counsel for the defendant have filed a most elaborate brief, a large portion of which is directed at the supposed bad policy of the statute, an argu-

ment much more appropriate before the Legislature than this Court. They insist it violates the fundamental idea of insurance, which is indemnity; that it encourages arson; that it increases the cost of insurance."

The time allotted us will not permit a discussion of such considerations, even if we felt called upon to defend the wisdom of the Legislature. It is well known that the practices of the insurance companies, both life and fire, led to the legislation now so strenuously attacked. Promises held forth to the assured in the policies in use when this and similar statutes were enacted had "too often proven a delusion and a snare," and, as the courts were powerless to correct the evil, the Legislature interposed, not only in, but in many of the States in the Union, to remedy the wrong * * * "no company is bound to insure any piece of property without first making a survey and examination of the premises, and is not compelled to insure the full value then; but having the opportunity to inspect fully before insuring, and then fixing the amount of the risk, and receiving the premium based upon such valuation, it ought to be forever estopped, in case of a total loss, from denying the valuation agreed upon."

(This legal opinion was rendered regardless of changes in use, value, or earning power, during the three or five years' life of the policy.)

The decision was confirmed by the S. C. of U. S., with an additional slap at the insurance companies and sop to over-insured enterprising claimants, as follows: "We see no risk to insurance companies in this statute. How can it come? Not from fraud and not from change, because, as we have seen, the presumption of the statute do not obtain against fraud or change in the valuation of the property. Risk then can only come from the failure to observe care; that care which it might be supposed, without any prompting from the law, underwriters would observe, and which if observed would make their policies true contracts of assurance, not seemingly so, but really so; not only when premiums are paying but when loss is to be paid."

Insurance or other corporations are not disappointed when juries decide against them, but this class of decisions by the courts encourages fraud, discourages contests for legal rights, forces the payment of excess losses, and adds largely to the "too high cost of fire insurance to the people."

Recognizing the teachings and the effect of decisions of this class on the public, the prudent underwriter makes more profit and more good business reputation by paying claims that should not be paid, and assessing such payment into the rate, than he would in contesting and only winning a bad name; but in so doing he becomes an accomplice with the public for the crime

of destruction of property by fire, and the "too high cost of fire insurance to the people."

The story of the swearing farmer whose cart tailboard was removed by mischievous boys, when driving up a hill with a cartload of apples, scattering them along the road, and who, when he discovered his loss, looked at the apples and then at the boys in the distance, and said, "Boys, I will not swear; I cannot do the case justice," expresses our feelings on this class of law; but the insurance companies must accept the class as the law of the land, and to be able to pay losses must stand by or must increase the now "too high cost of fire insurance to the people."

In an article in the January number of Everybody's Magazine, by Samuel Hopkins Adams, on this subject, which he heads "Burnt Money," with an editor's note:

"This is a record of shame. A sensational indictment of American extravagance. We know that our national fire bill was startling, but the facts and figures that Mr. Adams presents here shocked us. They'll shock you. Not satisfied with slaughtering our forests, we are burning up our homes at a killing pace every year. We are pervaded with pride over our superiority to the rest of the world, while actually our fires cost us more than the combined loss of any other six civilized nations. Here are the figures straight in your faces. You can change the record. Mr. Adams shows how. Remember, we cannot as a nation waste our substance and prosper."

Mr. Adams says: "That in forty-nine of the principal cities of Europe there is less than one fire annually to every thousand inhabitants." "In this country we have four and a half fires annually to 1000 inhabitants."

"The per capita loss in Italy is twelve cents yearly. In Germany forty-nine cents. In thirty of the largest European cities sixty-one cents, and in two hundred and fifty-two American cities the per capita is three dollars and ten cents."

"Rome pays its Fire Department \$50,000 per year; its fire loss is \$56,000 annually. New York, with eight and a half times the population of Rome, spends \$10,000,000 (exclusive of \$3,000,000 for high-pressure water), but the total loss per year is \$7,500,000, or 135 times that of Rome."

"Berlin pays its Fire Department \$312,000 a year, with a fire loss of \$169,000."

"Chicago, same size, pays \$3,087,505, and its fire loss is \$5,000,000 a year."

The article is good and if I had not written on the subject I could have copied it, with much saving of labor to myself and with much benefit to the Association.

The Journal of Commerce and Commercial Bulletin of Dec. 15th also has an article on this subject by President Edward T.

Campbell of the "American Central," in which he sums up that the "fire waste" is in part caused by:

First. By lack of stringent building laws and the enforcement of standard construction.

Second. By lack of supervision of construction in municipalities to prevent "cutting corners" to save a dollar at the expense of property-owners and the public.

Third. Failure to enforce regulations in cities where ordinances, have been enacted, which, if enforced, would materially reduce the number and extent of fires.

Fourth. Failure of municipalities to co-operate with fire insurance engineers looking to protection from exposure fires and to reducing each loft in every large area building to a separate compartment to minimize the opportunity for the spread of fires.

Fifth. Failure to remove Fire Departments from political influence.

Sixth. Failure to provide adequate water supply and distribution.

Seventh. Failure of wholesale and jobbing merchants to require retail merchants to keep accurate records of their business so safeguarded that, in the event of fire in their premises, the means to demonstrate their loss will not be destroyed.

Eighth. The existence in various States of anti-trust laws which interfere with the companies performing that public service which is expected of them and drawing the attention of proper authorities to physical defects and suggesting remedies therefor.

Ninth. The enactment by various States of valued policy laws, which are not needed to protect any man who has suffered an honest loss, and only serve to create a speculative condition for a dishonest man and enable him to collect more than he has suffered in damages.

Tenth. The enactment of various States of anti-coinsurance laws which prevent making a contract that would require property-owners to carry an amount of insurance on their property in fair proportion to the values insured, and thereby bring about a proper average distribution of rates and losses.

Eleventh. Prejudiced jury conclusions and court findings, whereby a contract of insurance, in the main a legislative creation, does not receive the fair and impartial consideration that is accorded an ordinary contract, a note, a mortgage or a deed.

"If necessary, these abuses must be covered by the rate collected for the indemnity required by the public, and it rests with the people and their representatives to unite with the companies in correcting the existing evils."

This article would have saved me a lot of work if I had found it earlier.

The people make the hazard and the hazard makes the rate;

eliminate the cause of "too high cost of fire insurance to the people" and competition will force rates to follow the reduced hazard.

Proper methods of constructing buildings, whether brick, stone, frame or ironclad; proper watching; proper fire department; proper cleanliness and policing; proper care in writing policies and adjusting losses; proper survey and proper estimate of commercial value, not boom cost or cost to replace not wanted property, by the agents and proper inspection of risks by the special agents as adopted and carried out by the factory mutuals that have reduced their cost of fire insurance in the last fifty years from four per cent to one-fifth of one per cent per annum, will, if applied to all classes of property, reduce the present "too high cost of fire insurance to the people."

Instead of abusing the rate-making associations for trying and failing to make the rates high enough to cover the now "too high cost of fire insurance to the people," the enterprising underwriter should insist upon the people making a reasonable and a profitable rate by reducing the fire waste and doing their share towards the protection of, instead of assisting directly and indirectly, in the destruction of property. (Applause.)

The President: The paper read by Mr. Sexton is non-technical, and I regret that the time at our disposal does not admit of a general discussion. I wish that it did, as this is one of the valuable and authoritative documents and should be read very carefully after it gets into the printed proceedings or into pamphlet form. Every special agent should endeavor to obtain a copy to carry with him to educate the people as to the reason of "the too high cost of fire insurance." I will not ask now for a discussion on the subject, because it is the noon hour.

This meeting will now be adjourned to reconvene at 2 o'clock sharp this afternoon.



AFTERNOON SESSION.

The President: The first paper this afternoon is from a new contributor, Mr. Edwin Parrish. The title is "Local Agents."

LOCAL AGENTS.

By Edwin Parrish.

It must be admitted that the relationship between the Companies as a whole, and the Local Agents, while of necessity friendly is not such as should exist in a business which is practically a partnership between Agent and Company and dependent so entirely for permanent success upon the heartiest co-operation and mutual effort along the proper lines. In looking for a cause and possible remedy it appears that the Companies are themselves greatly to blame for present conditions in that appointments of Local Agents are often made without consideration of other features than the volume of premiums in sight and the cultivation by Special Agents is not always in a direction most conducive to good practices. It requires a very capable all around man to make a good Local Agent and in a fair sized city or town he occupies a prominent position, his business and social standing being fully as high as that of doctors, lawyers, or other professional men, yet while these men are required to spend years of study before they are allowed to practice, it is quite common to appoint as Local Agent a man of no previous experience, simply because he is expected through relationship or otherwise to produce a certain amount of business. We allow men with no knowledge of insurance to bind the Companies in contracts involving thousands of dollars, and Agents with no idea of rates or tariffs, other than the "book says so," are our common means of communication with the public. I submit that this is calculated to lower and cheapen our business in the eyes of our policyholders. If, as we believe, the insurance business is a science, the study and application of which requires ability of no mean order, by all means let us live up to our belief and maintain the dignity of our profession. We have on this Coast many sterling agents of unquestioned ability, and we should consider ourselves under obligation not to lower the high standard which they have established. In contrast to the inexperienced agent, we sometimes find that overly smart chap, the man so aptly described by the phrase "so crooked he can't lay straight in bed." Agents of this class are a very disquieting

element, and in their efforts to overreach a competitor, frequently find it necessary to deceive the Company, with the result of involving the latter in disputes or controversies in the settlement of losses. As a man is known by his companions so shall a Company be known by its agents, and any Company maintaining tricky agents will in time be classed as unreliable. We all know the agent who is continually kicking against rates and forms, the man who cares only for his commission, and nothing for the interest of his Company, and who commonly informs the assured that his Company would gladly write the risk at a lower rate, but the Board will not allow it. This man is also a disturber. Possibly there are some grounds for objection to rates or schedules, but the Agent who does not recognize the fact that he is a representative of institutions which are being conducted on broad lines based on the experience of many years, should seek some other field of usefulness. Dealing with this question from the Special Agents' standpoint, it is, of course, understood that your principal duty is to get business. While to a casual observer it might appear that your sole object in view was to enjoy life to the fullest extent, scattering flowers as you passed along, we know there is a mutual understanding between yourself and the Company that you are out to get the Agents, and, incidentally, the premiums. It must be remembered, however, that your record is not made in a day or a year, and in the final reckoning the quality and cost, as well as quantity, of the business will be taken into consideration. Instead of preaching the gospel of economy many Special Agents seem to feel that the only effective method of cultivation is to point out to an Agent some new scheme for spending the Companies' money. A handsome new cabinet for supplies, cost to be apportioned among the several companies represented is quite frequently suggested, and printing of daily reports and other forms is a fruitful source of revenue, or taxation, according to the standpoint from which it is viewed. While there may be some merit in the claim that an Agent's work is simplified by using one set of blanks for all companies, these freak Daily Reports—no two with the same arrangement of information, and printed on paper all colors of the rainbow, are a nuisance to handle in the office, and to charge the Companies about five times what it would cost to supply their own forms, is adding insult to injury. Until the Local Agents are prepared to follow the recommendation of their National Association and make use of a uniform blank, the practice of special printing should be discouraged. From the Companies' standpoint, no agency is profitable unless it is reasonably permanent, as the initial expense of establishing and cost of the extra cultivation required

for the first year or so is ordinarily much in excess of any profit to be derived. Aside from this, no Company, or General Agent, desires a fluctuating business. Most of us like to imagine that we can look ahead and figure out what is going to take place a few years in advance, and it greatly disturbs these calculations to have your premium income at certain points fall below expectations, instead of progressing with the geometrical precision which we consider right and proper. The Agent who can be depended upon to give you a good growing income is more valuable to the Company than the "lightning striker" who increases your business 100 per cent the first year and a little later sells you out to an excess commission paying Company. Having secured our perfect Agent, there are many directions in which his co-operation and assistance will be of great benefit. The one aim of every honest worker in this business of ours is to reduce the fire loss. Why is the annual fire loss in European countries 33 cents per capita, and in the United States over \$3 per capita, or practically ten times as great? What can be done to lessen the great fire waste of \$250,000,000? Experts tell us the cause is poor construction, and the remedy good building laws rigidly enforced through frequent inspection. Along this line most of our larger cities have passed ordinances which, while not as strict as those of European countries, must be considered fairly good, and we now have fire marshals, inspection bureau representatives, electrical inspectors, sprinkler inspectors and Board of Fire Underwriters' surveyors, all traveling around at the expense of the Companies, endeavoring to make certain that our laws are complied with. This costs money. With an increase of say three per cent expense to a business which is already overburdened in this respect, we are covering only a few of the larger cities, leaving the smaller places to take care of themselves, and if the system were extended to cover the entire Coast, the percentage cost would be much greater. This cannot go on indefinitely without pinching some one, and if it proves necessary for the Companies to maintain and extend the elaborate bureaus which are now being established, the time may come when the man who surveys and rates will also attend to the little detail of placing the insurance. The American Agency system is the greatest in the world, but if all of the Agents were capable and trustworthy it would be unnecessary to send a surveyor 50 or 100 miles to make a five-cent change in rate owing to the addition or removal of some slight deficiency, and a few words of advice from an agent whose opinion was respected would often prevent the erection of a firetrap. We hear agents complain that the larger brokers are a menace to the business as they are securing so many of the important risks, but do the

Locals stop to consider why this is so? Aside from a few well known concerns, whose doubtful practices we all deplore, it is safe to say that in the great majority of cases the preference shown the broker by the assured is simply the reward of merit, and if the agent wishes to compete on an even basis, it is up to him to become familiar with schedule ratings and be in a position to explain same to his clients. This educational duty toward the Assured is perhaps the most important function of an agency, as it is the Companies' only means of meeting the criticism of policyholders who usually feel that they are paying too much for insurance. Our agents are not only the producers of premiums, they also to a certain extent make or mar our reputations, and many a Company has been unjustly criticised because its local representative either could not or would not stand up and explain the right and justness of a certain line of action. Until such time as the Agents can be impressed with the fact that upon their shoulders rests a great share of the responsibility for the proper conduct of the business, imbued with the feeling that good faith toward each other and toward the Companies is best for all in the long run, and convinced that some technical knowledge, as well as the mere art of soliciting, is essential in the make-up of a good agent, the system cannot be considered as being wholly a success. Another evil from which insurance interests are great sufferers is unjust or freak legislation. Several States have laws designed to prevent rate-making based on combined experience; some have laws prohibiting any increase in rates, and in several legislatures the question of rate-making by a State official has been seriously considered. We also have exorbitant taxes, based in some cases on our gross premiums instead of net income; the average rate on this Coast including city and county licenses, being about 3 per cent. This excessive tax cannot be justified on any sound economical ground. There is no excuse or reason for taxing Insurance Companies to any greater extent than will provide sufficient revenue for the maintenance of Insurance Departments which may be considered necessary for the proper supervision of Companies and protection of policyholders, and the natural way to control or effect reforms in matters of this description is through organizations of Local Agents who are the connecting link between the Companies and the people, and in the best position to conduct a campaign of education. At the last annual meeting of the Southeastern Tariff Association, the President in his address reported that no adverse legislation had passed, and gave all the credit for this result to the Local Agents. If this can be done in other sections, why not on the Coast where our eleven thousand agents could wield a wonderful influence? It is

often found that the proposer of a hurtful measure is a man who has had an unpleasant experience with some Company, through an agent who either wrote the insurance incorrectly, and thus caused trouble in the settlement of a loss, or who was unable to explain the Company's position in a matter of rate. These troubles could often be avoided if Special Agents would pay more attention to the wording of policies when inspecting risks, and if you can make it a point to see that the insurance is correctly written, you will receive the appreciation and thanks of Policyholder, Agent and Company.

In conclusion, allow me to state that while these remarks may, to a certain extent, be considered as theoretical, I do not believe the ideas are impracticable. If, when making the appointment, we bear in mind the responsibilities which an agent assumes, we must acknowledge that it requires a man of exceptional ability and sterling integrity. I know that we now have on this coast many local representatives who rank as high as any in the land, and with these men as a nucleus, concerted weeding out of objectionable timber, and assistance to good men along the proper lines, will in a few years accomplish wonders. It has been urged in some quarters that Agents should be required to pass an examination the same as students of the law and other professions, but this is hardly feasible under our present method of conducting the business. Several of our Universities now include a course of lectures on insurance, copies of which can be easily obtained, and the best of our insurance journals contain much matter which is broadly educational. Years ago it was customary for the Companies to issue hand-books of instruction which contained much valuable information, and if this practice could be resumed, with the books made uniform in their general instructions, I believe it would be a step in the right direction. (Applause.)

The President: This is certainly one of the best papers we have had on local agents since I have been coming to these meetings. It should be carefully read and considered by all special agents, and it would not be a bad thing if it would get into the hands of all local agents. I would like to hear discussion on the paper.

Mr. Kinne: I would like to say a word. Of course, I am not a young man in the business—a little over forty-two years—and I know something about local agents; and I want to say right here that it is to be regretted that there is not present at this meeting now the one hundred and fifty members that came to

listen to the address of the President. This paper is so terse, so practical, and so to the point, that I would make the suggestion that the paper be printed, not only for the use of local and special agents, but for the benefit of all of us. Later on I will make a motion to that effect. When a person gets at practical things, and tells them rightly, he will always have an effect upon the people that he is addressing. There were so many things in this paper that I tried to make little notes of them as I went along, because I was very much interested in it, but I failed to do so because they were so numerous.

There are one or two things, however, that are worthy of very serious consideration by the managers of companies. One of these is, that, if possible, there should be a uniform blank prepared for the preparation of what is known as the "Daily Report." Companies must have their own policies, of course, written on their own forms; but if certain requirements were made of all local agents on a certain properly prepared form, it would simplify matters, and the special agent would be much assisted in the duties that he is expected to perform. The special agents of some companies go out and say, "Oh, well, it is no matter. You just send in a blank daily report and we will write the policy. We will approve it." There are certain essential points covered in this paper which would tend to make the business better, and they should receive the earnest consideration of the managers present. I wish this paper could go through the hands of the special agents into the hands of all local agents, for they are a very important factor in our business; we cannot get along without them.

The other suggestions made are of such material importance that it seems to me that it might be well to have this paper printed for the information of all concerned, and that a special committee should be appointed to take the matter up. We do not come here entirely to get acquainted and have a good time, but we come here, in my opinion—and I am sure the organization was formed for that purpose—to derive some practical good out of our conferences, either through the verbal discussions or the properly prepared papers. Now, I have been speaking informally—have been thinking on my feet, as it were—but, at the same time, I believe that this paper comes so near hitting the

mark of practical underwriting all along the line, from the local agents to the manager, and from the manager through his specials down to the local agent again, and it is so essential to our business, that more attention should be paid to it even than to the very fine and formal address of our presiding officer. This is no disparagement to him, because that is along an entirely different line. I could go on and make some other remarks about different things regarding the paper that has been read, but I so heartily approve of it, after having passed through the various stages of practical insurance, from soliciting from the insured to visiting the local agents and trying through our special agents to look after their interests and our own at the same time, as one of the managers of our company, that I really believe, without any disparagement to the good papers that are going to follow, that we ought to take special notice of this terse, practical, short-winded paper. Therefore, I move that it be printed at the expense of this Association, and that a committee be appointed to go through the paper in all its details and make such recommendations as they deem best in the matter of bringing about the admirable suggestions made by our member, Mr. Parrish, with the understanding, however, that I be not one of the committee.

The President: I will see to that. (Laughter.)

The motion is duly seconded.

The President: I am very glad that these remarks have been made. To tell you the truth, when I got this paper I read and reread it, and when handing it to Colonel Kinne I said: "It looks to me to be something unusual." The Colonel told me that he read it twice and considered it an unusually good article. I would like to ask Mr. Trathan what he thinks of the conditions mentioned.

Mr. Trathan: I think the suggestions in this paper could be acted on with much benefit to all of us. We all know in the office how much trouble we have with incomplete daily reports, and we know how much it throws us out when agents use a daily report gotten up by themselves, giving us no information about how they make the rate, or when the last inventory was made, or any information from the manager's standpoint. I think it would be a great advantage to the business if we could

have a uniform daily report. That, it seems to me, is one of the most important things that we could take up here.

The President: There is a motion before the house. Are there any further remarks? It is moved by Mr. Kinne that this paper be printed and that a committee be appointed for the purpose.

The motion is unanimously carried.

The President: It is so ordered. The President will appoint the committee later.

I wish now to introduce to you Mr. C. I. Hitchcock, of Louisville, Kentucky, where they say they have the finest whiskey, horses, women and editors in the world. (Applause.)

Mr. Hitchcock: Mr. President and Gentlemen of the Fire Underwriters' Association: This morning this Association paid me the signal honor of electing me to Honorary membership because I had come from a long distance and was about to present a paper for your consideration. To me this is a double honor, because by that action you have thought of taking the paper on trust. Had the suggestion come from your President, I might have considered the honor somewhat less, as he has read the paper. The subject is, "Cornerstones of Fire Insurance."

CORNERSTONES OF FIRE INSURANCE.

By C. I. Hitchcock.

Any discussion of the San Francisco earthquake and fire of 1906 before you veterans who bore the brunt of that great disaster will seem the damnable iteration of a subject of which you are all weary. But the general world of insurance is not tired of it. Every day's distance from that ominous April makes its significance in insurance history loom more impressive and wonderful. It provided, in fact, one of the very cornerstones of the vast institution of fire insurance. It was a cornerstone laid in its place while all the civilized world looked on and while all the civilized world was contributing its mite to the millions upon millions that were necessary to make San Francisco secure.

No one knows better than you that the significance of the disaster was not alone in the personal misfortunes that attended it. Nor was it in the great struggle for the survival of the fittest, which at once began to ameliorate those misfortunes insurancewise by the payment of losses liberally, without ignoring business contracts and thus setting precedents that would undermine the basic practices of fire underwriting.

Its real significance was in the supreme test it laid upon the principles of the business of fire insurance and in the effect it is now having and is yet to have on underwriting.

Literally speaking, the San Francisco fire furnished the third cornerstone of fire insurance.

The first cornerstone came out of the "Great Fire" of London in 1666 when 13,200 buildings, occupying 436 acres, were utterly destroyed. The losses in money were estimated at what we now express as \$52,000,000. but money in England at that time had a purchasing power probably more than five times as great as it now has in this country. The "Great Fire" was in material extent and money value nearly as great as that of San Francisco—enormous as that was. Relatively it was much greater.

Conceive, if you can, the mortal blow to San Francisco if on the 18th day of April, 1906, there had been not one dollar of fire insurance carried on any property in the city.

That was what befell London over three hundred years ago. Fire insurance was then unknown—even life insurance was a semi-charitable embryo. So slow was the recovery from the disaster that nearly forty years afterward Evelyn, the diarist, recorded that London was almost, but not quite, as great a city as it was when the fire occurred. In other words, it took London more than forty years to rebuild itself after the fire.

Look at the miracle that fire insurance has worked here. It has brushed aside forty years as though but a twelve-month and San Francisco again sits here the throned Empress of the Pacific. Her great disaster is a deathless sentimental, poetic and chronological fact, but commercially and materially its effects have been overridden as the beach comber overrides the swelling wave that seems to be hurling him to certain death.

Three hundred years ago it was not alone London that suffered by her "Great Fire," for the bankruptcies and ruin that followed in its wake carried out to individuals all over the world, wherever the long arms of that metropolis reached out in commercial embrace. There was no fire insurance, there could be no commercial security; there was no collection, there could be no distribution.

The San Francisco disaster reached as far and perhaps farther than that of London. Your commerce was perhaps much greater than London's in 1666, but there was fire insurance here and so there was commercial security; there had been collections all over the civilized world and there was an immediate distribution in San Francisco so vast in its extent that the world has never before witnessed its parallel. And, despite the struggles and misunderstandings that grew out of the momentary despair that gripped this community, let it be said that the liber-

ality and fairness of that distribution, as a whole was as a crown topping the whole history of fire insurance with glory.

Here and there were spots of tarnish; there were a few companies of our own country and a few of other lands that had depended too much upon luck and not enough upon the limitation of exposed liability. To use a homely expression, "they had bitten off more than they could chew." In that lay the invaluable lesson of the disaster to insurance.

The "Great Fire" of London, let me repeat, furnished the first and main cornerstone of fire insurance and upon it the first structure was reared. The extent of the losses suggested the application of the principles of risk and indemnity, so long understood in marine insurance, to the insurance of property against loss by fire. London had been restored to its greatness, however, in the forty years that intervened before the first fire insurance company was organized on the present general lines, and it was eighty years later that the idea was transplanted to the United States where its greatest operations are carried on.

The second cornerstone of fire insurance was laid in Chicago in 1871. There the disaster was almost as great to insurance companies as to the community. Many companies were unable to pay their losses and failed. Others reached out for new premiums and dumped them into Chicago, trusting for their salvation to the lack of close supervision and the immunity from losses that seems invariably to follow a great conflagration. Even at the best the showing in Chicago was anything but satisfactory and demonstrated the weak materials in the structure of fire underwriting.

Let us review briefly the composition of these three cornerstones:

First—The London fire. Here, of course, there was no insurance and there could be no distribution. The loss to individuals was not spread over a long period of years in premium payments but came at once and left them helpless and stranded. This demonstrated the necessity for capital to indemnify against loss by fire—organized capital to collect from the many and distribute to the few.

Second—The Chicago fire. Not quite fifty per cent of the insurance loss and about twenty-five per cent of the property loss was distributed, this conflagration demonstrating the necessity for widely distributed centers of insurance capital and the accumulation of surplus funds—a new factor.

Third—The San Francisco fire. In this, the most stupendous of all the known conflagrations, there was a distribution of about eighty-five per cent of the insurance loss, and say sixty-five per cent of the property loss—a very heavy proportion and one that seemed impossible of fulfillment immediately after the

fire. When the further fact is considered that the destruction of San Francisco was not by a "straight" conflagration but by an "earthquake" conflagration with all its attendant complications, the percentages become all the more remarkable. The prime lesson in San Francisco was the absolute necessity of broadening the underwriting conception of the conflagration area. Prior to this conflagration the area burned over had been divided into about six probable conflagration districts. It is the possible and not the probable that now governs.

Even at the time of the Chicago conflagration underwriting was embryotic. There was no cohesion, no association, no co-operation. Rates were what the individual companies could obtain and they often charged in proportion to what they had to lose.

Out of this chaos came order and by showing the necessity for net surplus a brake was put on the then prevailing system of financing by advancing rates. The foundation of the new system of securing stability of rates by means of the schedule is merely the evolution of the Chicago fire and its demands for surplus.

The value of the Chicago lesson was demonstrated in San Francisco. True it is that companies were hard hit here on the Coast and it was discovered that many had not learned that surplus accumulations did not bring protection unless limitation of liability to possible (not probable) conflagrations, was enforced as a safeguard. The new system of permanent rating by schedule was also tested and notwithstanding the enormity of the losses, rates generally were not disturbed. That rates were increased on this Coast was natural in that it was local, but the general effect was small, and by this time no doubt the increase has all been absorbed. It is evident now that rates will be revised, hereafter, in longer periods and will provide in themselves for the conflagration hazard. It is just as evident that to secure safety, companies must accumulate surplus and limit liability to conflagration in the same measure. As the surplus increases the liability can be increased to meet the demand that will always develop in the large centers.

Thus we see that fire insurance has, like the fabled Fenix, grown out of the ashes of conflagration. It has required these three great disasters to give insurance birth and to reveal the weaknesses of its constitution. The conditions that surround conflagrations, insofar as they apply to the trade side of underwriting, have been most aptly expressed by Mr. F. W. P. Rutter, the distinguished British underwriter, who said:

"Conflagrations are the fertilizers of our business. They impart new vitality into ground which has been getting sodden and stale; they stimulate growth; they are like bread thrown on

the waters, coming back to us a hundred fold. They constitute the finest advertisement—the strongest vindication that a fire insurance company can possibly desire. They demonstrate to the laity, to those outside the pale of our profession, that, whatever immunity we may enjoy for a time—whether it is for five or ten years—we are never safe from the possibility of a fire that may cut a large slice out of the greatest city.”

Those are words written not to prophesy, but in the spirit of prophecy—before the San Francisco disaster. They are words of golden practical philosophy that should guide every broad-minded underwriter.

Conflagrations have their uses; they are needed for their lessons and they are quite as sure as death and taxes, but I'm quite convinced that this fertilizing business can be overdone in conflagrations like that which licked up San Francisco with its three hundred and fifty millions of property.

Now, having done with the subject proper, there comes the temptation to be personal. For a short time it seemed to those in the conflict as if fire insurance itself might almost be engulfed in the disaster that overtook the city. It is the veterans of war, who, when peace has come, appreciate most keenly the fine qualities of their adversaries.

Those of you who were in the storm center of that terrible struggle between claimants and claim payers—only you can appreciate how triumphantly and splendidly fire insurance emerged from that trial.

Not the companies of America alone, but those as well of our kindred peoples across the oceans, met the sudden blow with heroism and supreme courage. Out of the clash of condition and form and necessity arose misunderstanding, jealousy and criticism among companies. The flame was increased by the heat of personal friction. Mistakes were made and hard words were said. But now, when coolness has succeeded to fever, when judgment has supplanted fighting blood, I believe it is recognized that every honest company did its honest best and stood alone upon those conditions of its contracts which it had the legal right to enforce in normal times.

What one company did then, another might be compelled to do elsewhere under similar conditions. The law of self-preservation in business is inexorable and it has its limits of justice well recognized among all business men. This is shown by the fact that those companies that did all they could do have lost no standing among the business men of this country. Those fortunate ones that were able to settle upon a basis that was not only just, but generous, have reaped the harvest of their liberality; but those that were able to be only just, even though

it were to scantiness, have also deserved and received their reward.

To have weathered the San Francisco disaster is now and long will be as a membership in the Underwriting Legion of Honor. (Applause.)

Mr. Hitchcock: I have been told by a number of underwriters who were in the business at the time of the Chicago fire that it was quite a common thing in that community to charge a rate proportionate to what you had to lose; that companies with small assets and small surplus could not get as much for their policies right after the Chicago fire as those that had larger accumulations. This reminds me of the individual underwriter in Baltimore who was very successful in putting his own personal policies on the market. He started in marketing them at a very low rate, and gradually increased the rate until he finally secured a rate commensurate with those of companies with large capital and surplus. One of his friends discussed the subject with him one day and said, "Why is it that you are charging so much more now than you did a few years ago?" "Well," he says, "there is a mighty good reason. I have got something to lose now." (Laughter and applause.)

The President: I do not think that I made any mistake when I went after Mr. Hitchcock. He was the first man I solicited to write a paper for this Association, and I feel under personal obligations to him and the Association fully appreciates not only his writing the paper, but his coming out here and reading it for us and meeting us face to face. I have no doubt that the underwriters from the Pacific Coast will remember Mr. Hitchcock for a long time to come. I will ask if there is any discussion on the paper. I saw Mr. Folger paying close attention, and I should like to hear from him.

Mr. Folger: Mr. President, the subject, which has been admirably presented by the speaker, would lend itself to a long discussion. It is a great advantage to have information that we know brought home to us in a direct and simple way. Of course, everyone knows more or less of insurance history—the dates of the London, Chicago and San Francisco fires, and possibly the amounts involved; but too often we forget the effect of the conflagrations upon our business. It seems to me that the conditions

described briefly by the speaker at the three dates mentioned were even more marked in their differences than he was able to bring out in so short a time. It must be remembered that the time between the London and Chicago fires was over 200 years, while less than fifty years had passed before the next conflagration occurred. I cannot help admiring the way in which a layman has handled the subject, which an underwriter would have found it difficult to cover to advantage in so few words. If I may have a moment or two, I should like to add some suggestions which may not have occurred to Mr. Hitchcock—how some of the conditions existing at the time of the Chicago fire had come about. If one were to add another cornerstone—and he has chosen a conflagration for each—I should select the St. Louis fire of 1849, which has almost been forgotten by this time. The St. Louis fire involved a loss of about the same amount as did the conflagration in Spokane Falls in 1889, with which nearly all present are familiar; but while the total amount was about the same, the loss incurred by local companies in St. Louis was about equal to that of the foreign companies in Spokane. There were no foreign companies doing business in St. Louis, and there were no local companies doing business in Spokane. This was one of the great changes that had come about. In 1849, only a few agency companies existed in America, and the wealthiest of all of them—the Franklin of Philadelphia—almost withdrew from the agency field after its severe loss in St. Louis; while the greater New York and Connecticut companies were organized, or extended their business, within four years afterwards, and the first of the foreign companies established its United States branch at about the same time. Beginning with the New York fire of 1835, local companies incurred the heaviest share of conflagration losses in the United States; and it was not until several important, and many smaller, conflagrations had occurred—ending with the Chicago fire in 1871 and the Boston fire in 1872—that the public learned that the old cry, “Keep your money at home,” cannot wisely be applied to the insurance business. The St. Louis fire was one of the heaviest shocks sustained by the earlier companies, and has been singled out for this reason. The great reason why losses in San Francisco were so nearly met was that only two of the original seventeen local companies were still in

existence; while the loss by the local companies in Chicago was paid to a very small extent. From the middle of the last century the companies learned the lesson that they must spread their business widely in order to survive. The lesson learned from the Chicago fire was that it was not sufficient to spread the business widely, but that they must, in addition, have an ample surplus over all liabilities. These points of history are so interesting that the students among our membership could well afford to follow up the paper and familiarize themselves with the details of which the speaker was able to give so few.

(Applause.)

The President: Mr. Folger must not go away with the idea that Mr. Hitchcock is a layman. He is an instructor to the insurance managers of the country. (Laughter and applause.)

The next paper we have on the programme is by Mr. Henry Carstens, President of the Washington Fire Insurance Company, of Seattle. Mr. Carstens was unable to attend our meeting personally, but sent down his paper. I will now ask Mr. Harry Gordon to read it to you. The subject is, "The Education of a Neophyte."

Mr. Gordon: It is with much pleasure that I am able to read the paper of Mr. Carstens on "The Education of a Neophyte." There is no doubt that the President, in asking me to read this paper, had in mind the timbre of my voice prior to the earthquake, but he forgot that during that trying period it deteriorated, because I was obliged to explain at least a million times to my customers why "The Traders" failed. (Laughter.)

THE EDUCATION OF A NEOPHYTE.

By Henry Carstens.

Once upon a time, a humble but industrious lumber merchant, yielding to the lure of the enormous profit and the great fame to be attained in the vocation of fire insurance,—as the spell-binder described it,—invested some of the results of long industry and severe frugality in a fire insurance company and graciously permitted himself to be elected its president and general manager.

Coming into a strange environment, his sensations have been somewhat like those of the fanciful "Traveler from Altruria," or of the "Man from Mars," and you experienced gentlemen, to whom everything pertaining to the business has become second nature and commonplace, may be mildly interested, though certainly

not instructed, by a Neophyte's point of view, even as the awkwardness of the newly landed immigrant at Castle Garden may furnish the blase Gothamite a few moments of amused condescension.

What first impressed the Neophyte with the wisdom of his choice of vocation, was the discovery that one of his most important duties was to be the investment of the company's funds, a grateful occupation in pleasing contrast to his former frequent and carefully considered amenities with his bankers, from an entirely different standpoint. I can conceive of no more delightful labor than that of investing funds, and sad indeed was the later realization that there are departments in fire insurance that require more time than does the Investment Department, and that their functions are much less exhilarating. After a certain incident known as "the San Francisco conflagration," the Investment Department was put in charge of the office boy, and the President's higher administrative qualities devoted chiefly to the Loss Department.

One of the features of fire insurance which somewhat astonished the newcomer, was the comparative ease with which business could be secured. In lumber, the getting of orders is difficult and laborious, customers being secured and retained only by severe competitive effort. But the Neophyte had no sooner installed his fine new oak counter than friendly offers of business came pouring over it, and greatly to his satisfaction, from some of the town's most important citizens. He recalls particularly the friendliness of a department store manager, of a rich meat packer, of a paint factory proprietor, and of the owner of a successful garage. Now, with the suspicion born of bitter experience, the Neophyte regards with distrust, the overtures of his dearest friends, and would investigate the moral hazard of a Parsifal or a St. Anthony. He has discovered that while a certain amount of even **good** business is obtainable, with comparatively less effort than in merchandising, the attainment of a volume worth while is attended by much of the same humdrum effort and unremitting energy. Assuming the usual inertia overcome, however, it is the almost unlimited volume of business procurable in fire insurance, which makes it so attractive to the newcomer, and which makes it likewise so dangerous.

I recollect that in the early period of his company's operation, the Neophyte (he was **very** verdant) looked upon fire losses somewhat as the well man looks upon sicknesses. They **occur**, he knows from observation, and they **may**, perhaps **must** occur even to him, but in his mental vision, they are vague and remote phenomena of no **great** present personal interest, and not likely in any event, to have much effect upon **his** excellent constitution. For some two happy weeks, the facts coincided with this vague belief, and then the burning of two threshing machines (his first,

his only and his last) brought him to realize that the careful filing of daily reports in fireproof vaults did not prevent combustion in the risks they described. This loss of his underwriting virginity dated an epoch in the Neophyte's fire insurance career. Before then he had accepted about everything in the way of a risk that was not actually in flames at the time of the acceptance. Thence forward began some masterly underwriting. A boot and shoe stock burning next, boot and shoe stocks went immediately upon his "prohibited list;" a woman lost her residence, and the fair sex became "taboo;" a farm house burned and country risks were declined thereafter; an Irishman made a loss claim, and thereby condemned his gallant race; and the unfortunate burning of your fascinating city required, under this treatment, the prohibition of *cities*—whereupon this budding underwriter paused and for the first time began to have some doubts as to the efficacy of his system. It looks fairly safe, but like feeding a hen on her own eggs, there is a time limit to be considered. Your Neophyte now humbly follows as nearly as he may, the practices of his older and wiser brethren, and while not looking upon them as clairvoyants, exactly, is well satisfied, nevertheless, if he fare no worse than his fellow passengers in the underwriting ship, partially compensated for the meagreness of the fare, by the excellence of the company. With an obstinacy born of chagrin, he refuses to admit, however, that there is a "science" of underwriting; for comparative certainties he prefers the kindly dice.

That eloquent man who enticed the Neophyte into the interesting realm of fire insurance, had dwelt with convincing impressiveness upon the wasteful extravagance of the older companies in the matter of expenses. The more intelligent and more frugal management of the Neophyte was to result in generous dividends from the saving in this respect alone. Valiantly the Neophyte girded on the sword of Economy, and pitilessly he smote at the head of every expense that protruded. The result was an undoubtedly low expense ratio, **while his company kept at home**, but as it wanders afield, and seeks its share of the business of the great world, he somewhat anxiously realizes that it costs money to obtain and properly look after business, and that this perhaps **too** great cost is realized by every other manager likewise, and that the **remedy** and not the fact, would be a discovery. While he has not, as you perceive, shown himself qualified to express opinions of value, he ventures upon your forbearance to intimate that a solution of the expense problem will not readily be found, in view of the very thorough dispersion of fire insurance facilities demanded by the public; we must serve, and serve **well** the citizen of the remotest hamlet, and such service is **necessarily** expensive. Let him pay what it is fairly worth, as he pays the freight upon his lumber in addition to its mill price. Let the merchant likewise, who lives in the

crowded city and, who, by act of commission and act of omission, creates and maintains the dreadful hazard there,—let **him** pay fully for the extraordinary service which we render him, and if he grumbles about paying, or through his legislative representatives, would prevent us from receiving or crucify us for demanding an adequate return for the thing we sell him, let him attempt to do without it. We sell a necessity of business life. There is no superfluity of it,—no over-production of **our** wares—in large cities at any rate. The strangest fact impressed upon the Neophyte by his new environment, is the extraordinary moderation, not to say timidity, of those who hold in their hand, so tremendous a power as the fire insurance company. It is to their credit,—to their very **great** credit,—that they make no attempt to abuse this power, but is there not something suggestive of decadence in our fear to offend an agent by peremptory instructions, a suspected arsonist, by declining or delaying the payment of his claim; the legislatures, and the newspapers, by boldly advancing inadequate rates? I am not sure just **what** we fear, but it seems in the final analysis, to be our competitors, but they are not so very formidable; with the hair off, they look very much like ourselves. If this unusual plasticity to external pressures is the result solely of competition, it is an exceptional and an unhealthy result. Lumbermen and merchants in general, fight like wolves for a good order, but for instance, when disturbed in the enjoyment of a fair and accustomed freight rate, they turn upon the disturber a savage but entirely homogeneous pack. Perhaps that is all that is needed; greater homogeneity in the face of common dangers, and surely there can be no better way to bring about such great homogeneity than the frequent recurrence of meetings such as I have had the honor to address. Who knows but that if they could be held quarterly instead of annually, we of the younger school, might, in our time, live to see the dreaded legislator from Prairieville, bearded in his den. If the contribution of the inexperienced could be made to point a moral, the moral would be this—“Let us not forget the ‘fortiter in res’ while cultivating so assiduously the ‘suaviter in modo.’”

(Applause.)

The President: I am sure you enjoyed, as I did, this terse, witty paper. Mr. Carstens admits that there is more truth than joke in his experiences, but if you will keep your ear to the ground you will hear from Henry Carstens, the underwriter, in another vein before a great while. I am very glad now to introduce to you a comparatively new citizen of the Pacific Coast, a

new member of our Association, and a new contributor—a good man with a good name—Mr. Washington Irving.

Mr. Irving: Mr. President and Gentlemen: Perhaps a word of explanation and apology is due, as usual. I want to say a few words this afternoon upon a subject that has been agitating the minds of underwriters, more particularly for about a year back, and that is Publicity, and I want to speak of publicity more in connection with this body.

PUBLICITY.

By Washington Irving.

As I understand it, the membership of this body is individual; limited by no distinctions as to class, and embracing alike the men of those Companies co-operating with each other along Board lines and of those operating independently.

A broad, catholic and; in the best sense, representative association; the chief function of which is, I take it, educational.

It is this educational feature I would emphasize; suggesting an extension of the sphere of usefulness of the Association to embrace, not only the education of the individual and collective membership, but of the general public as well.

Has it ever occurred to you that a fire insurance company is a public service corporation—in the same class as a company furnishing transportation, water, light or any public utility or public necessity? The utility and necessity of fire insurance as a safeguard against the utter annihilation of material wealth and as the foundation of all commercial credit requires no explanation. It is the one point about our business that the public understands and appreciates.

The people are very vitally interested in their public service corporations in these latter days. The time has passed in which Vanderbilt could voice the sentiment of his day and class "The public be damned."

This modern public refuses to stay damned—it is from Missouri—it must be shown. It wants to know all the particulars—where the money goes (where it comes from is patent), and whether it is properly and conservatively expended.

It is the people's money, they say—and they say correctly; the people have the right to know that they are not being exploited because of their necessities; and, while recognizing that capital is entitled to a fair return, they will see to it that those necessities are supplied for a reasonable tax—that there are no undue profits.

This, as I understand it, is the present attitude of the public mind toward all public service corporations—including fire in-

insurance companies—and the last result of that attitude is an attempt at regulation through acts of legislature of the various States.

And through all the attempted regulation of modern days there runs an undercurrent of prejudice—slowly deepening as evidenced by the increase in adverse legislation—and cropping out in the most unexpected ways and places. This prejudice has been engendered in part by known abuses in the conduct of certain classes of public service corporations—and in a very large part by ignorance.

The known abuses—the stock jobbing, financial manipulation, the taxing of the people to pay dividends on fictitious valuations, or water, the unfair rebate, the improper influencing of legislation, municipal, state and national,—these are happily absent in fire insurance—and have but an indirect effect on the creation of prejudice.

The correction of an abuse does not of itself indicate prejudice, if our people would only stop at that. They do not. Our people are prone to go to extremes and (here is where the prejudice comes in) the reform measure develops into a punitive measure. Innocent and guilty suffer alike and the fire insurance companies meekly—very meekly as is their wont—bear their burden along with the rest.

But it is the prejudice engendered by ignorance which is of the more grave concern to the fire insurance interests. It affects them directly and powerfully and the remedy lies, in a measure, within their reach—public enlightenment—Publicity.

It is useless to close our eyes to the existence of this prejudice—to pooh-pooh it, belittle it, evade it. It is here—its manifestations are patent.

Ours is essentially a government of public opinion. Few measures are enacted into law; or, if so enacted, subsequently enforced, unless they have the backing of public opinion. Do you suppose that there would be such a monstrosity as a valued policy law among the statutes of so many of the States except as a result of an **unenlightened** public opinion?

And yet even a valued policy law is not entirely unreasonable from the view point of a public without knowledge of the theory and practice of insurance.

The public argues that fire insurance is a commodity. If a man buys \$1000 worth of hay, for instance, for future delivery under certain conditions, he has the right to that hay to the last whisp. Similarly if a man buys \$1000 worth of insurance he is entitled to receive the full amount for which he paid, should his contract become a matured claim.

The Company insured the building for \$1000, in other words, agreed to pay that amount should it burn—and any question of value is not an issue. If the Company thought the building worth

but \$800—it should have refused to sell the larger amount—there was no obligation and the Company is expected to know its business. But, after agreeing as to the amount willingly, and accepting payment of the premium cheerfully, its adjuster should not come around after the fire and seek to discharge an obligation of \$1000—by payment of any lesser sum.

We, who are instructed, are able to recognize the fallacy of the reasoning and point out the errors in both major and minor premise. You are all familiar with the stock arguments—that insurance is not a commodity, but a tax. Anything, therefore, which increases the number of beneficiaries of that tax by making insurance a profitable venture for the assured increases the tax itself; and an expert appraisal of each individual property before an insurance contract issues would make that tax unbearable. That the Company did not insure the building (the building would burn insured or not) but the owner of the building against loss by its burning—and that the insurance policy is a personal contract and of indemnity only.

The valued policy idea, the public opinion underlying that idea and its fallacy are used merely as an illustration. Other restrictive and harrassing measures have their origin in similarly erroneous ideas and faulty reasoning—the misbegotten offspring of ignorance out of prejudice; ignorance of the vital conditions surrounding and governing the conduct of our business, and that prejudice which, grouping fire insurance with the other public utilities, goes to punitive extremes in attempts at regulation.

Another manifestation of the trend of public opinion may be observed almost any day in the columns of the newspaper press.

The newspaper is generally supposed to mold public opinion. It certainly does; but just as certainly it seeks to lead in voicing what it deems to be popular sentiment with due regard to the subscription list and consequent value of advertising space. You pick up a paper and read an inspired article on insurance topics and are tempted to exclaim "What bosh!"

Suppose it is "bosh"—the general reader is not aware of that. The space writer is merely expressing the opinions he has picked up on the street and if the reader knew what you know the article would never have been written.

Without ignorance there would be a minimum of prejudice. What greater duty has any member of this Association to the interests he represents, to his associates or to himself than to use his utmost endeavor to enlighten that ignorance and dispel the prejudice. And in approaching the discharge of this duty it will be well to recognize that the public has a grievance—real or fancied—but still a grievance—and in some respects more real than fancied. It does not like what it considers the arbitrary ways and methods of the fire insurance people—it is not satisfied to be told that a thing is so and therefore to be accepted.

The average American is wholly unwilling to accept a mere dictum without the grace of a proper explanation, and this explanation has been too seldom or inadequately made. No time or trouble is too great, nor is any effort wasted, which will gain a larger measure of confidence in our honesty of purpose and of appreciation of our intent.

Better take the public wholly into our confidence and forestall the inevitable and rather pugnacious demand "Show me," by a gracious "Allow me to show you." Even those who are least amenable to reason can be convinced of our sincerity, if not by our arguments. The attitude is everything.

I would like at this time to call to your attention some few of the points upon which the public requires enlightenment—and why—and some few of the ways in which proper information can be disseminated.

Other points and other ways will occur to you as I talk. The field is a large one and cannot be covered within the limits of a single brief article, nor can all the details or arguments be presented. I can only hope to indicate, generally, the points and ways which seem of the graver moment.

What the people generally believe is that rates are arbitrary and arbitrarily imposed; that they are higher than necessity warrants, producing undue profits; that fire insurance is a Trust, organized to exact the last cent the traffic will bear; that such part of the premium income as is not paid out in losses is profit (there is no adequate conception of expense); that fire companies are too prone to avail themselves of the technicalities of abstruse policy conditions designed by them and for their own protection solely.

Out of these beliefs comes the annual crop of insurance legislation—Anti-compact laws, anti-co-insurance laws, valued policy laws, standard policy laws and above all taxation.

The people should be shown how, in the last analysis, every man makes his own rate. Rate making now-a-days is by schedule in which every point of fire protection, construction, exposure and the like is a charge or an allowance; based upon the experience of the Companies over a long series of years and uniform in application.

I believe in the condensation and simplification of schedules to the utmost degree and in their general distribution, with a brief explanation, through the local agents, so that every insurer might check up his own rate and see how it is made and why. I believe better and quicker results in the way of diminution of hazard, particularly that of conflagration, can be produced in this way than in any other. All companies, associated and independent, use the rates determined by schedule in fixing the price of the indemnity they sell. The associated companies may

think they should not publish the results of the application of schedules (an expensive work) which can be used in competition by independent companies not contributing to the cost, but I believe the education of the public and the possibility of lessening the hazard to be of the greater moment.

Our people are careless—criminally careless sometimes—in their neglect to properly safeguard their property and particularly in their methods of building construction. There should be no hesitancy in proclaiming that fact. We are in too much of a hurry—we want quick action. A decent five per cent return from a solid, substantial, well-protected building for ourselves and our posterity does not interest—"What has posterity done for us? We want a 10 per cent or 15 per cent return for our money and we want it now," and the flimsy fire trap building continues to multiply.

The relation of poor construction to high insurance rates must be hammered into the people. It must be shown that the annual loss per capita in the United States is \$3.02—in other words, every man, woman and child in the United States would have to pay a tax of \$3.02 each year for the fire waste of the country if the tax were a personal and not a property tax. In European countries the fire loss averages 33 cents per capita, and very few fires extend beyond the building in which they originate—here we have a heavy conflagration loss every year. An utter annihilation of material wealth which would require an annual tax of \$3.02 on every inhabitant is appalling—the tax is grievous—and the remedy is with the people themselves. Tell them so.

Owing to carelessness and poor construction the cost of adequate fire protection is greatly enhanced. It requires just so much more in apparatus, men and water supply; and this is an added tax, over and above the \$3.02 per capita. When the fire protection is inadequate (as it too often is) the rates naturally increase; but, whether paid for fire protection or for insurance protection, the tax remains. It is too high—too severe a drain upon the country. The fire insurance interests recognize this and understand the reason. The people only feel the weight of the tax—when they, too, have a proper conception of the reason they will exert themselves to lighten the load.

For years the fire companies have been the pioneers in everything pertaining to the reduction of the fire waste; building codes, municipal regulations, fire department and water supply, electrical installations, and fire prevention devices of all kinds have received most careful thought. The work in the closet has been painstaking and thorough, but the work in the field is as yet inadequate. The public will insist upon regarding it as undertaken by the companies solely in their own interest—to lessen loss payments and increase their profit.

We should try to make the people understand that it is their own money we are attempting to save for them.

We should urge, in season and out, the general adoption of the National Building Code, the establishment and extension of fire limits, the passage and enforcement of proper ordinances to lessen the hazard, a full measure of fire protection for every city and town and the appointment of competent fire marshals on the Ohio plan. We should demonstrate the theorem that \$5000 at 1 per cent produces just as much premium revenue for the company as \$1000 at 5 per cent and that the lessened hazard which enables and warrants the sale of the larger amount of indemnity for the same money is the real rate reducer. Again it is the public which makes its own rates.

What would be considered undue profits in fire insurance? In a mercantile or manufacturing business, a net profit of 10 per cent on the annual sales or operations would not be considered out of the way. Would an underwriting profit of 10 per cent per annum be excessive in view of the risks taken by the capital engaged in it—the chances of conflagration less? The public would probably agree that it was not but would still remain strongly of the opinion that the operations of the fire companies show profits in excess of that figure. It is our duty to explain the facts.

The statistics of the National Board show that for the years 1860 to 1907 there was an actual underwriting loss of 86 per cent to all companies. This was the average loss—some few individual concerns won a profit; with many others the loss was far greater. During the last ten years (notable for conflagration losses) thirteen of the sixty largest companies transacting a general business show an underwriting profit of eight million dollars upon premium receipts of three hundred and eighty millions—a trifle over 2 per cent—while the remaining forty-seven companies show an underwriting loss of fifty-nine millions—an average net loss of fifty-one millions—our business is one of averages it will be remembered. There is no undue profit in these figures.

During the period of 1880 to 1907 no fewer than 413 fire companies found the pace too hot and failed or retired—a sufficient commentary on the hazards to which insurance capital is exposed.

And yet the presentation of these facts does not satisfy our people. To them it is incomprehensible that the fire companies should be making an underwriting loss and at the same be paying more or less satisfactory dividends and increasing their assets.

If we are to still the cry of undue profits, we must explain

the banking features of our business and the real source of the dividends.

In the long list of interest bearing securities comprising the assets of a fire company, and forming the bulk of them, can be found the capital, the unearned premium fund and the surplus. The first two of these will also be found in the liabilities, the surplus being the balancing item between assets and liabilities. The capital upon which the dividends are paid is a liability of the Company to its shareholders, it is a guarantee fund for losses and all other debts of the Company. In the meantime it is earning interest.

The unearned premium fund is the liability of the company to its policy holders for the unearned portion of premiums paid in advance. It is established by law in all the States and is available for the one purpose only (except latterly in Massachusetts.) It does not belong to the Company, being moneys held in trust; but it too is invested and an interest earner.

The surplus, the real measure of strength, is the one thing absolutely owned by the Company which has no strings to it, and earns interest until the securities have to be sold to meet conflagration claims.

Here are three sources of income from invested funds out of which to pay dividends. The importance of strengthening the surplus is so well understood that dividends are kept at a moderate figure in order that the interest earnings may help to swell the reserve funds—and underwriting profits (when there are any) are generally passed to surplus—the underwriting loss being always a charge to this account.

A few statistics: In the last ten years, seventy of the leading Companies showed income from investments of ninety-nine million dollars, out of which dividends of sixty-four millions were paid—the remainder—thirty-five millions going to strengthen the surplus funds, and even this vast sum was not enough. In this period the stockholders of these seventy companies have been called upon for a further sum of twenty-three millions to make up the deficiencies in the underwriting account.

All this is the financial A B C of our business, yet the general public has very hazy ideas on the subject.

The importance of the surplus in its true meaning—a conflagration reserve—should be dwelt upon as of the most vital importance to the people themselves in assuring the continued solvency of the indemnity which is their necessity. When the surplus is gone the capital is impaired and the company must stop by provision of law; the public cannot afford to have their fire companies stop. At the beginning of 1907, and as a result of the San Francisco conflagration, the surplus funds of all companies were reduced to one hundred and seventy-three millions—

much too small for the immense values at the risk of the insurers, and where an ordinary annual fire waste of \$225,000,000 to \$250,000,000 must be taken into consideration. Another large fire in the congested high value district of any one of a dozen cities would have produced a cataclysm in the business relations of the entire country.

The reserves are not yet strong enough (excepting individual instances) for entire safety—and rates should be fixed at a figure which will allow of some small per cent of underwriting profit to be passed to surplus account. This is what the public needs to be taught.

Fire insurance is a Trust—according to the newspaper—a combination in restraint of trade. An association of this nature should have a special educational value in dissipating such an idea.

Some companies operate within a Board, the controlling reason being a lessened expense and the establishment of uniformity in the rate by a joint survey and application of schedules. Other companies, many of them strong, experienced, solvent concerns operate independently, making their own rates and using their own experience tables without reference to others. It would be impossible to maintain rates yielding any undue profits by improper combination or trust methods where so many independents are offering their indemnity. When a strong, experienced independent refuses to write at less than the figure established by joint survey, it is proof positive that responsible protection cannot be furnished for less cost. Competition is too keen and business jealousies too rife, not only between the two classes, but among the individual companies, to allow of improper combinations.

Each one of us should consider it his special duty to make this plain, irrespective of affiliations, the interest of one being the concern of all.

Another matter in which the public should be vitally interested, if properly explained, is the unjust, improper and oppressive taxation of insurance companies—the cause for which is twofold.

In the first place, the fire company being looked upon as a public service corporation seeking undue profits from the necessities of the people, the tax is a clumsy attempt to secure a return of a portion of the supposed profits.

In the second place, the tax is a large revenue producer, is indirect and easily collected and so commends itself to the legislator who is uninformed as to its true effect.

The tax is levied on the premium, which is adjusted to cover expense (including taxation) and as such is paid by the people. Insurance being in effect a tax, the anomaly is presented of the

public imposing upon itself a tax upon a tax—the double burden largely adding to the cost of protection.

If the tax were upon profits or property it would be understandable, but it is upon a process of trade and illogical. As a source of revenue to the State it is unequable and discriminatory, not distributed over the community but borne only by those whose energy and thrift have created material wealth. Capital is a coward—insurance capital proverbially so; but, if we will not put up a fight against improper taxation ourselves, we can at least point out to our insurers what their legislatures are doing and enable them to make the fight on their own account.

Other things suggest themselves which may be briefly mentioned, among them insurance supervision. We have it; good, bad and indifferent; the people do not know the difference but we do. The insurance companies are not in politics—it is no part of their province—but if the State official, elected or appointed, administers his office, incompetently, inadequately or improperly—if it is an organized appetite for fees and nothing else—we should certainly say so. We have been timid, as usual, in this respect.

Another thing is the public lack of essential knowledge concerning the conditions of the policy contract and of the clauses in general use. All of us have had many instances where loss claimants have found too late that they were not properly protected. Then, if the Company stands upon the contract, it is said to be resorting to technicalities—that the policy is a one-sided agreement—you know the talk. The result of their own carelessness it is true; but if the people will not learn of themselves we must teach them as a measure of self-defense, else we find attempts at legislation like the Standard Policy Bill which emanated from the Senate of the last California legislature, determining the liability under practically any and all circumstances and affording no protection to the Company.

In bringing these matters to your attention I have had in mind the value of the Association as an educational factor. It is, as I have said, catholic as to membership and above all—it is not a rate-making body; its efforts should be the better received on that account.

A strong committee of this body on "Public Information", with sub-committees for the various States or sections of the field could make its influence felt—incidentally it would find plenty to do.

Its chief sphere of labor would be before Boards of Trade, Chambers of Commerce and like associations of business men. City Councils and even legislative committees, explaining and teaching the theory and practice of our business and the mutuality of interest, and urging the extension of protection, the

adoption of restrictive ordinances and other measures for the reduction of the fire waste.

Right here I might call attention to two little places where that might have done a great deal of good last spring. The little city of Petaluma, where the chickens and cheese come from, had an idea that it was improperly taxed for insurance. They had a meeting of their local Chamber of Commerce, and they resolved and whereased and the local paper came out with a long screed with the usual attack upon fire insurance as a trust and the undue profits exacted, and so forth. Their chief argument was that so many thousand dollars had been taken out of Petaluma in the last ten years, and only so many less thousand dollars had been paid back in fire losses, the balance, of course, being **prom**. That was an argument that was most readily capable of being reduced to a **reductio ad absurdum**, and if a committee from this body had gone up there and pointed out to the Board of Trade, and the people generally, that the converse of that proposition was also true, that they had the usual conflagration rates and the usual risks, and that a bad loss by fire was liable to come any time, that would swallow up four or five times what they had paid, they, of course, would agree to pay the same rate for the next ten years. It should have been pointed out to them that the insurance permium was simply a tax distributed all over the entire country, and that the entire civilized world, either directly or indirectly, paid the San Francisco losses. Astoria in Oregon has come out lately with a little screed as to the fire insurance trust, and more particularly to repeal of the deposit requirement, and a little journey up there by a committee would have been very profitable.

The newspaper press would help—it would publish as news the doings of such a proposed committee and, from time to time, little paragraphs of general interest such as the increase in fires from defective electric installations, with the reasons for such increase. This could be followed by agitation for ordinances preventing electric lighting companies from turning on the current in buildings not wired in accordance with the provisions of the National Electric Code. Endeavor to create a public sentiment and let that sentiment do the work and in this the newspaper is the greatest factor.

The better education of the local agents is of prime importance. They come into the more direct contact with the people; in the aggregate their influence is very great and they should be furnished with all the information necessary to enable them to explain intelligently the workings of our business. We do not give sufficient attention to this, viewing them more in the light of producers of premium than as **representatives** of the company. I think this view point wrong and believe the remedy is education. The man who knows his business is the man who

gets the business—who has, in a large measure, the confidence of his community and the greater influence. As a material argument—apart from ethics—it pays to educate.

Associations of local agents should be fostered and encouraged. Aside from the benefits to be expected in the conduct of the business the association gives added weight and increases the sphere of influence and utility in presenting and advocating measures for reducing the hazard and preventing fire waste in their own communities and in averting hostile and ill-considered legislation.

The instruction of the local representative devolves upon the Special Agent. Here again the Companies have not recognized fully their responsibilities or their opportunities. In the anxiety for volume of premium, the function of the Special as a producer has been unduly magnified, while his greater value along other lines, has not been sufficiently developed. Working individually and in committees and sub-committees of this Association, there is much which could be accomplished by the Special Agent—prospects which have not even been filed upon as yet.

The supreme test of any educational work we may attempt will come with the successive sessions of the legislatures of the various States.

Hitherto these have caused successive annual spasms in the diaphragms of all managing underwriters—an uneasy feeling of impending doom while in session and a sense of relieved anxiety following adjournment.

I do not believe we have always exerted ourselves in the best direction or availed ourselves of the best means to avert adverse legislation.

It is not enough that we should appear individually or by committee or by counsel before legislative bodies to advocate or oppose an issue. We are then regarded and rightly so—as the direct representatives of special interests and our arguments as special pleading.

Once the idea becomes established that anything which increases the difficulty and cost of transacting the business is an addition to the insurance tax rate, the people are interested immediately. It is the people's money. If, after full explanation, they still desire to increase their tax burden—that is their right and privilege. If they do not desire it, their opposition is direct and effective. Acting individually, through associations of business men, through the newspaper press and through the local agents they make their wishes known, and their representatives in the legislature hear from home—with admonitions to "kill that fool bill."

The need of public education—Publicity—is gradually becoming more and more apparent—and the recognition comes from both the insurance interests and the people.

In the East, various colleges have added to their curriculum a course of lectures on insurance and insurance law, the Western Union,—a non-rate-making Association of Underwriters—has appointed a Committee on "Publicity and Public Education," and now the National Conservation Committee is calling on the National Board of Underwriters for aid in formulating measures for reducing the appalling annual fire waste.

It would seem meet and proper at this time, that we of the Coast should take upon us our share of the work. (Applause.)

The President: This is a very important paper, and a very good paper—one that will stand close reading—and I would ask if any of the gentlemen would care to discuss it for a minute. I believe it runs along the lines Mr. Thornton has been preaching for a good many years. What have you got to say about it, Mr. Thornton?

Mr. Thornton: This is perhaps "neither the proper time nor place" to discuss the details of carrying into effect the excellent suggestions made by Mr. Irving for bringing our business before the public by way of education. I hope, however, that the Underwriters of the Pacific Coast will, in the near future, take some steps along the lines suggested. As the best method of educating the public is through the corps of local agents, I hope the time is not far distant when copies of Mr. Irving's paper will be in the hands of all local agents throughout the Pacific Coast, in order that they may enlighten their clients, the property owners, on the underlying principles of insurance. Some years ago an able physician stated that if it were not for ignorance mankind would die only of old age or fatal accidents. Ignorance, to some extent, in the medical profession is almost unavoidable. We can accomplish better results in the underwriting profession and educate the people more rapidly to a proper understanding of our business than has been done in the past. The principal feature to which Mr. Irving referred is taxation. This is our greatest burden, as I believe that there is approximately five per cent of the premium income paid in taxes. I would advocate the placing of schedule ratings in the hands of all property owners, distinctly showing that the rates carry a charge for taxation. At the present time the insured search these schedules in vain for such a charge. They

find one per cent additional for this, two per cent additional for that, and no charge for taxation. If each man who goes to the Board Office and secures the schedule rating of his own risk found, printed in red ink, a charge of five per cent, or seven and a half per cent—being five per cent plus the cost for collection, making about seven and a half per cent—if he found seven and a half per cent added to his rate and brought to his attention in red ink, he would soon advocate on the part of his Assemblymen or Representatives or Senators the enactment of legislation for the reduction of taxation on insurance premiums to such an extent at least as would support only a supervising executive in the State Department. It is getting close to the hour of adjournment, and I will not take up any more of your time, except to express my appreciation of Mr. Irving's able paper. (Applause.)

The President: I will now appoint the committee on the President's address, as follows: Messrs. A. W. Thornton, Herbert Folger and H. P. Blanchard. The committee to whom will be referred Mr. Parrish's paper will be composed of Messrs. Trathan, Fores and Tiedemann.

The meeting will come to order at 10 o'clock sharp tomorrow morning, as we have a very long programme.



SECOND DAY.

Wednesday, January 6th, 1909.

The President: I wish to say to you that the By-Laws and Constitution had to be re-written after the fire of 1906, and will have to be approved at this meeting. If the Secretary will read, we will take up section by section.

The Secretary (reads): Constitution on the Fire Underwriters' Association of the Pacific, section by section, and the same being put to vote, was adopted.

Mr. Kinne: The dinner committee now wish to have decided this new matter, the closing paragraph. It states that "Guests may be invited by members" (reads rest of paragraph). I stated before that our dinners for the past years and this year cost more than the five dollars that the members paid, but because the members paid their annual dues, it has been considered entirely proper that the additional cost should be paid by the Association so far as they are concerned. Now, then, it has been the privilege of members of the Association to invite guests—their own clerks, heads of departments in the various companies. But these guests have not paid any dues. As the dinner cost more than five dollars, I think the guests should pay more than five dollars apiece. This matter was brought up a year ago, and the clause inserted here. What we want to know is whether you feel that you would be taking snap judgment to say that at this dinner the members that invited guests of this character shall pay seven dollars and a half, or shall they only pay five dollars for them as heretofore. We have got to know right away, because the list is being made up by Mr. Morrison, and when it comes to the collection I want to know whether we will tax them seven dollars and a half this year or not. Some think it is proper to do it this year. Others do not think it is right.

Mr. Folger: I was Chairman of the Special Committee which recommended last year that this action be taken. While the proceedings show this report to have been adopted, there was no discussion on it, and it was never considered at the

meeting. I think, therefore, while this meeting has now adopted the section, that it would be improper to put it in force for 1909, and I therefore move that the concluding part of the article be in force beginning with 1910.

Mr. Kinne: That is, for them, the dinner committee, to collect but five dollars this year.

The Secretary: I second the motion.

The President: The question is, shall the seven dollars and a half apply this year or next year. Mr. Folger's motion is that it apply next year; not this year.

The motion was unanimously carried.

Mr. Kinne: There is one thing further—that anyone that has not paid their dues for 1908 cannot come to the banquet until they have done so.

The President: The first paper this morning is from Mr. Herbert Folger on "The Writing of Papers."

ON THE WRITING OF PAPERS.

By Herbert Folger.

Many years ago, one of our best writers, in a rash moment, promised to write his first paper. After looking helplessly and long at the blank leaf before him, he found a friend. "Do you know much about the subject?" he was asked. "Yes." "Do you know more than some of the men you are to speak to?" "I think so." "Very well; I don't know anything at all about fire insurance; sit down and write me a letter, telling me what you know, in language that I can understand. When you have finished, that will be your paper." While it seems odd that men who write intelligent reports all the year round should be fearful of giving their names and thoughts on these occasions, it is true. To such as these, a few suggestions are offered, with the hope that at least one new writer may be advantaged.

First, upon determining to write a paper, make a list of subjects, first general, and then specific. Examine the index to the proceedings. When a subject has been often dealt with, put it aside, unless you can present it in a new light. After reducing the list to its lowest terms, choose that which will best meet the following requirements: (1) The subject must be of immediate interest to others; (2) you must be familiar with it, or be in a position to become so; (3) if possible, there should be one suggestion, of value to the business, which you can offer. Do not try to cover too much ground. If you write

on special hazards, choose one. If on one hazard, cover but one locality, preferably the one where you reside, or where you can thoroughly inspect the class. Learn and read all you can about the subject, until you are full of it. A busy year is a short time in which to prepare a paper, with the belief that you will read it with approval twenty years afterward. Having made general preparation, do not write a long paper all at once. First say all you can in one sentence, which should include the gist of the matter to be presented, and, especially, the conclusion to be reached, or the recommendation to be made. This will be the skeleton of the paper. Next, extend this sentence to three or five sentences—not more—which may represent headings or divisions of the completed paper. After this, write each of the sentences at the head of a separate sheet of paper and make copious notes under each of the material possessed or to be sought for. When this has been done, a glance will show whether the proper proportion is likely to be observed. Probably the notes on one sheet will far exceed in number and length those on the other sheets—which is another way of saying that the writer is better versed upon, or has a deeper interest in, that phase of the discussion. This will be a good time to resolve that some of the matter is not essential. Conversely, the sparse notes under another heading may show that it needs amplifying. When the process of revision is complete, rewrite the headings in proper order on one sheet, and the syllabus of the paper will be ready. If a writer does this thoroughly, he will find out that he has not so very much to say, after all, and that it ought not to need more than three thousand words to say it in, with the view of putting life and animation into the skeleton. A writer who can present a practical paper of real merit, in everyday language, may even retain the interest through five thousand words; but it is easier to commend the paper, "Simple Electrical Inspection in California," written by Mr. G. A. R. Heuer in 1907, than to follow his example.

To give this discussion more scope, let us consider the writing of papers of three kinds—(1) a practical paper; (2) a theoretical paper, and (3) a general paper.

Practical Papers. Having resolved to deal with a special hazard, suppose the writer determines upon California as the locality, prefers mining risks, and finally selects mining dredges, which are found chiefly in Placer, Butte and Yuba counties. At the end of a few days of thought, the substance of the proposed paper might be condensed into the following sentence: "The modern mining dredge should be an acceptable risk at the present rate, (1) if of standard construction and with approved electrical equipment; (2) if the coinsurance

clause is insisted upon; (3) if the ground to be worked presents only moderate difficulty; and (4) if the returns are fairly even and leave a margin over operating expenses; but (5) the physical hazard should be reduced by doing all possible mechanical work away from the dredge and by protection, not depending upon electric power; and (6) the moral hazard should be eliminated by making the tract of sufficient area to justify the investment and to allow the writing off of the entire cost of land and equipment before the end of the dredging period.

Let us assume that the different sections of this sentence have been written on separate sheets. Under the first, "Standard Construction and Electrical Equipment," the writer would describe the dredge briefly. The requirements in the Board Dredge Schedule should be mentioned, without elaborating them; and, generally, when technical information is desired, endeavor to give it in footnotes, or in an appendix, when more than a few words are called for. A photograph should be submitted, and the dredge might be likened to a stern-wheel steamer, with the wheel taken out, the bucket line placed at the forward end of the dredge and the apparatus for discharging gravel at the other end. A vivid picture could be given of the pond, about thirty feet deep, in which the dredge floats, with the explanation that, as the dredge cuts away the bank in front, the gravel thrown off is deposited in the rear, gradually building up piles which are much higher than the original surface of the ground. It would be misleading to give the vague assurance that a dredge is of "massive construction," for, while this is true of the hull and frame timbers, the upper works give the resemblance, already mentioned, to a river steamer. They are sometimes painted or varnished, thus tending to encourage the rapid spread of fire. A few sentences might be allowed to describe the building of a dredge up to the point where the ground around it is excavated and an artificial pond made, in which it is floated before the last of the machinery is installed. The electrical equipment should be made prominent, as this is one of the chief hazards. The original current furnishing power to a mining dredge is frequently of twenty thousand volts, which is reduced to some four thousand volts, and this, in turn, is reduced to a few hundred volts by a second transformer, either on the shore of the pond, or on the dredge itself. In either case, the equipment should be carefully inspected, and, when the transformer is on the boat, provision should be made for running off the oil into the pond in event of overheating.

(2) Coinsurance Requirement. This explains itself and needs little discussion.

(3) The character of the ground to be worked is important. Usually the soil contains nothing larger than ordinary cobblestones, which may be seen by the thousand near Oroville, in huge piles. When boulders are encountered the obstruction may not only interrupt the work of the dredge, but may injure the machinery; and, if these, or very hard soil, are at all extensive, they may increase the operating expense to a prohibitory figure.

(4) The returns should be fairly even. Dredges are worked day and night, and the record of work for every hour is kept. As the ground frequently costs \$1,000.00 per acre, or more, and a modern dredge, which was considered costly ten years ago at \$65,000.00, may now cost \$140,000.00, the investment by a company operating over a large tract makes it important to secure regular and quick returns.

(5) The physical hazard of the dredge should be treated in a commonsense way, as the danger of a total loss is great, if a fire is once started. Some years ago it was not uncommon to find carpenter shops on board, rubbish piled against a transformer, and the latter placed a few inches from woodwork. Besides prohibiting such features, the companies must require buckets of water to be ready for instant use and some other form of protection not requiring electric power, as a fire may be caused by an electrical disturbance and the current be cut off from necessity.

(6) The tract owned must justify the investment and should allow the owners to write off the entire cost before the end of the dredging period, for the reasons that the value of the ground, after the dredge has completed operations, is a doubtful quantity, and that, as a rule, the owner cannot figure upon making use of the dredge elsewhere, as the cost of taking the machinery out of one dredge and putting it upon a new one in a different location has been considered to be against the venture in the past.

These brief comments give an idea of the course to be followed. It is needless to say that a writer would not reveal the plan in the completed paper; and it would not be imperative to use headings or subdivisions. As the comments just made represent only about one-fifth of the length of a suitable paper, there is ample margin for a more exact account of the hazard, and to dilate upon the conditions surrounding the risk. It would not be out of place to add a paragraph dealing with fire losses which have been experienced in California, and their causes; and to include another upon the reputed difficulty in using mining dredges in British Columbia and Alaska, where the soil conditions are such to impede the work, and where the period during which a dredge can operate may be restricted

to five months of each year, from climatic conditions. In England, a paper upon flour mills may cover more than one hundred printed pages; but an entire evening is given to such an address, instead of twenty minutes.

Theoretical Papers. Few papers of this class have been written, for the reason that they require much investigation, if the writer is to avoid committing errors and espousing wrong conclusions. Examples of these are the paper written by the late F. G. Argall entitled "Some Remarks Upon the Theory of Lines," and the papers read more recently by Professor A. W. Whitney, whose algebraic formulæ look as interesting as they are unintelligible. At meetings of life insurance actuaries such papers are the rule rather than the exception; while meetings like our own give the preference to everyday questions. Men who are able to discuss theoretical problems and who are conservative enough by nature to be guarded in their conclusions are of great value to the business, and the writing of such papers should be encouraged. Time will not permit of the elaboration of such a paper, but it might deal with "Fire Insurance Rating" or "Statistics." This could be narrowed by an inquiry into the experience of the companies in a single territory, or upon a large class. Ten years have elapsed since the close of the rate war on the Pacific Coast, and a valuable paper could be written upon its effect on the business, in which event it would be necessary to consider the list of companies doing business in 1893, since at the end of 1894 a few had already withdrawn, and to have regard for the business which remained in force, under which losses were incurred in 1895, 1896 and 1897, of which no report was ever made to the Insurance Commissioner. To a writer who seeks to deal with subjects of this order, every suggestion should be cautionary. That is, he must not do too much; must not form any opinion hastily; must not accept any figures as final, and must not start out with implicit faith in traditions. An original thinker is needed, but his thoughts must be clear and his judgment must be sound. All statistics should evince care in compilation, and should be carefully checked. A random instance of the necessity for this may be cited. Some fifteen years ago the secretary of the New York Fire Insurance Patrol conceived the idea of determining the insurable values in the congested mercantile district of New York city. Accordingly, after a fire which destroyed the contents of a nine-story building, and which damaged the neighboring buildings and some of their contents, he included in the annual report a statement of the estimated values in the block, made up from figures returned by the companies. The secretary seems to have distrusted his own figures, without revising them. If he

had done so he would have discovered that the amounts insured on the building and on the contents, where the fire started were given, while for a number of exposed buildings nothing appeared but the insurance on the buildings themselves, while the insurance on contents, perhaps several million dollars, in the aggregate, was not listed. The effect of attempting to determine the average value of a mercantile building and its contents by using the insurance on nine buildings, and the insurance on the contents of only three of the buildings, can readily be imagined. Men are so busy that they can give but scant attention to figures of this order, and, if they come from a source which has official sanction, we are fain to accept them. Hence a statistician should submit few conclusions, and be sure they are sound. Writers should approach theoretical subjects in the most modest frame of mind and should seek for light, rather than expect to give it. Some of you have read Mr. Crothers' new book, "By the Christmas Fire," and will have been entertained by his account of the man who is set in his opinions. "His definition of truth has the virtue of perfect simplicity. 'A truth is that which has got itself believed by me.' His thoughts form an exclusive club, and when a new idea applies for admission it is placed on the waiting list." Seek the opinions of others, not to follow them slavishly, but to give your own thoughts poise. Suggestions under this division of the subject could be continued indefinitely, but it is better to repeat that accuracy and caution must be the first considerations.

General Papers. Under this heading may be grouped the most numerous of the papers presented in past years, and those which will least bear analysis. Perhaps this is because one may write a fairly creditable paper upon a special hazard, after reading the reports of the National Fire Protective Association and inspecting a risk or two, if he does not indulge in hasty conclusions; and another may delve into statistics and achieve success before an audience which respects an effort to do real work; but the stringing together of glittering generalities on such topics as "Local Agents" and "Special Agents," or "The Relation of the Board to the Companies and to the Community," will not make papers of high order. Many writers might think and make notes for months, without producing an editorial of a dozen lines worthy to be read at the opening of the "Knapsack." The gift possessed by the late George F. Grant is rare and cannot be imitated. Formal rules for the preparation and arrangement of material are of less use in such writings; nevertheless, it is well to remember that the skeleton, though it be more cleverly hidden, must exist, if a paper is to have form and consistency. It is in papers

of this order that pruning is most desirable. One is tempted to express too many opinions, or to forget that his hearers are not wholly ignorant upon the general questions of the business; and the first tries their patience, as the second wounds their decent sense of self-respect. If, for example, we consider "The Training of Young Underwriters," or, more specifically, "The Future of the Insurance Institute," it is not needful to enlarge upon the educational value of Rate Book No. 4, which would make many of our auditors listless; but one may quote from an address before the Insurance and Actuarial Society of Glasgow with the reasonable certainty that many will never have heard of the society, and that nine-tenths will take a lively interest in matter which, in merit and flavor, reaches a very high average. Try to avoid mere description or relation in such papers; but seek for a suggestion of real value to the business, which may be illuminated by the account. In the preparation of a practical paper, we may be aided by card indexes, and may hope to read quickly the papers which bear upon a special hazard; but, in an attempt to deal with the functions of the Insurance Institute, one may read all of the inaugural addresses before some thirty Institutes and Associations, and be left with a maze of suggestions and examples, some quite contradictory, of which the most crude suggestion may be the best and the most intelligently expressed example may least deserve to be copied.

From the first moment that the title is selected, the mind must be impressed with the need of a good beginning and a good ending. While the latter is vitally important, the value of the former is great; since the power of a paper to hold an audience will be heightened if its attention is fixed by an attractive opening statement. It would pay a new writer to make a fresh start in a half dozen different ways, until the best has been found.

While the most of these suggestions are positive, rather than negative, there is one "don't" which is an invariable rule. Don't tell the Association that others know more than you do and would have written the paper better, or that you are sorry that you had too little time in which to do it justice. The first, they know, and will make allowance for; the second they will find out, if true, and the excuse is not valid. Remember that your hearers have had experience, and they will measure your effort and make a much fairer estimate of its value than you can.

Having given due thought to the orderly arrangement of a paper and made careful revision of the material itself, one should not be unmindful of its rhetorical effect. Much may be gained by keeping in view the requirements that written

matter should possess clearness, force and beauty. Strike out the superfluous words and, especially, all diffuse, florid and obscure sentences. Reduce as many words of more than two syllables to that number, and as many words of two syllables to those of one as possible. Due regard must be had for smoothness of diction, as, in some places, a long word may have a pleasing effect, while a short word may add force. Perhaps you will pardon the use of two excerpts from the papers of past years, from one of which the requirements mentioned are conspicuously lacking, while in the other each has its proper place.

(1) "If there be any who hold that it is no part of his business to educate the masses with respect to wholesome and reliable bookkeeping methods, I then insist that such a person but very imperfectly comprehends the position and relations he holds toward that large class of his countrymen, and, I might properly add, his dependents, who look to him for that nicely exact definition of obscurely concealed equities, which, for the lack of a better simile, I may compare to the work of the constructing engineer, who mathematically gauges the powers and endurance of the exquisite fabric his genius bestows upon the world, to enable it to cope with the hidden and mysterious forms of nature."

(2) "In early times a king, looking from his palace window, saw afar a river hast'ing to the sea; and, remembering that to the place whence rivers come, thither they return again, said, 'All is vanity.' He forgot the harvest fields and meadows made glad by the running river; and we, seeing how combinations are formed, only to be broken again and then reformed, forget the good they do during their brief lease of life."

As between these examples, you may choose for yourselves. One may feel the beauty of Tennyson's poem of sixteen lines, "Crossing the Bar," without taking it apart; but a master of style knows what gain comes from the fact that eighty-five per cent of the words are of one syllable only.

Read your own paper. Ability to think on his feet, and to listen to his own voice, without nervousness, is not born in a man, but is gained by the use of occasions like this. A recent critic has well said, in reviewing a book upon elocution: "The voice is the instrument of the spirit. Its right use means the possession of a clear and beautiful vocal language which conveys the nicest shades and subtlest gradation of expression. It is an immense power in a man, a great charm in a woman; for beautiful speech is the freeing of the soul, the easy command of a language adequate for its deepest or its most elusive emotion." One who learns to stand at ease on this floor, and to express his thoughts simply and clearly, will have made

an investment which will give him handsome returns in after life.

If a writer follows these suggestions, and others which he may readily obtain from those who have had like experience, what has he done for himself? To use the words of a man to whom similar advice was given some years ago and who was recently asked for an opinion: "He has become thoroughly conversant with his subject and may be referred to as an authority upon it in the future. He has gained experience in writing carefully and intelligently on what pertains to his profession, and he has acquired additional confidence in himself. He has brought himself creditably before older and more prominent underwriters, and it is probable that he has taught the veterans in the business something new. Now, if he will follow this up by discussing his own and other papers extemporaneously, when he has good ideas to advance, he will readily cultivate the ability to discuss insurance with agents, prospective customers, claimants, attorneys, or the Association."

It is not to our credit that not over one-fifth of the members living have ever written one paper. This is not in keeping with the number who constantly think and who could write effectively. Therefore, it seems likely that too many are daunted by the fear of failure, which is idle, or of criticism, which is always kindly, if given at all. In this connection, we may turn again to our Christmas writer, who, in referring to difficulties which are magnified, quotes an old worthy, who was responding to the suggestions of his faint-hearted brethren: "'It was answered that all great and honorable actions were accompanied with great difficulties, and must be enterprised with answerable courages.' What fine spiritual audacity! Not courage, if you please, but courages. There is much virtue in the plural."

So, with these thoughts, we leave the matter in your hands, hoping that some will be constrained to vie with us, who are jaded, for the praise of the Association. You cannot root out an evil, or promote the good of the business alone. The members of such a body as this, united under intelligent guidance, can accomplish wonders; and, by such co-operation, which means doing your part, you shall get much honor among your fellows, and great gain to yourselves.

The President: This is the delightful paper of an experienced writer, and I commend it particularly to the young man, or old man, either, who has not yet contributed to the proceedings

of this Association. In making up my programme I felt that I was over-driving a willing horse in asking Mr. Folger to give us a paper. I should like to ask Mr. Osborn, who is an old and good writer and a fluent speaker, to comment on this paper of Mr. Folger's.

Mr. Osborn: It would be quite impossible to make any comments on this paper, other than those of praise. Having listened to it with a great deal of interest, I confess personal benefit to be derived from the suggestions that he has made. The paper comprehends too much really for us to understand or appreciate in the one reading and it shall be my aim to read it over carefully and digest it. I do not know that there are any suggestions to make other than to say that in the analysis of the dredger hazard I might commence with the tail end rather than his method. Having determined that the class is desirable to underwrite, my first procedure would be to determine the moral hazard, which comprehends not only that of the person or owner himself, but other considerations such as to whether the field is profitable, or the machine constructed on the proper lines. If these be satisfactory, then proceed in the admirable fashion outlined by Mr. Folger in working through the various elements of the physical hazard. This, however, is a question of judgment, but I do hope that the paper will be read by every member of the Association, and especially by those who have not had an opportunity to write for us. It is surely a preachment of wisdom and grace. (Applause.)

The President: Mr. Hitchcock, how do you people in Kentucky grapple as you do the niceties of the English language? We would like to hear from you.

Mr. Hitchcock: Mr. President and gentlemen, I don't believe I can add a word to what Mr. Folger has said about the manner of writing and I think that the secret of paperizing has always been a careful study of the subject that you intend to write about, and then try to describe your own thoughts in the simplest possible form of language. After you have produced this effort you can go through it and ginger it up a little as they say, and put in a few qualifying expressions that may help out the whole—ginger it up. I think that you will find that your

basic effort will always be one that is the most satisfactory to you, and that the gingering simply smooths it or irons it, or finishes it, as the case may be. But that is the way to write a paper—the way he described it. (Applause.)

The President: Mr. Folger promised to add a suggestion or two to his paper verbally. He has not done so.

Mr. Folger: Mr. President, I apologize. I asked three or four men, as I met them, during the last month for suggestions. A wise man realizes early that he does not know all about any subject, and I received some capital suggestions for the paper. All the President said in answer to my question, however, as to what should be said to the young men, was: "You tell them that, if a fellow promises to write a paper, to **write it** if the heavens fall." Having been a presiding officer myself some years ago, and having been disappointed in promises, undoubtedly made in good faith, I do say, in all seriousness, that if any man, especially a young man, gives his word to write a paper for this Association he had better write it and read it, even if he has to neglect important interests of his own. There is no better opportunity in the business than to stand on this floor and to look into these faces, and to express your own thoughts, weak as they may be, if you want a name in your profession. (Applause.)

The President: I only wish we had time to pull out some of the other good speakers here in regard to this matter, but we have a long programme, and we will have to proceed to business. I am very grateful to Mr. Folger for his paper. I hope it will do the good intended.

The next paper is by Mr. Tiedemann, "Building Construction and Rates."

Mr. Tiedemann: After listening to such an able and instructive paper as Mr. Folger has read I feel somewhat timid about coming right along after it. I will, therefore, be the first to offer apologies to Mr. Folger, whose advice I am more than willing to accept, if I have failed to carry out his very good suggestions.

When, some ten months ago, Mr. President, you did me the honor to ask me to read a paper before this Association, and I had accepted the invitation, I had in mind the preparation of a

paper, the title of which would have been a little more out of the common, so to speak, than the one I have prepared. Unfortunately, however, valuable statistics and other important data which I had collected in the office in the past years had been lost. After much searching I failed to find it. Somewhat reluctantly I decided to write the paper which I am about to read, entitled "Building Construction and Rates."

BUILDING CONSTRUCTION AND RATES.

By T. J. A. Tiedemann.

It may not be amiss to say to you at the outset, that this paper is no dissertation on the technical construction of buildings, or the scientific fixing of rates applicable thereto. Articles and books have been written on these subjects by abler men than myself, and to them I shall refer any of my hearers who would go deeper into what I may call the science of the subjects, than I intend to carry you to-day. The observations or suggestions I may make, however, will, I hope, be eminently practical, and though I may go a long way from home in more senses than one, I trust my remarks will tend to direct your serious thoughts, and emphasize the necessity of action.

On the occasion of the last annual meeting of this Association, a number of excellent papers were read, all affording food for thought and discussion. Personally, I think the subject of Ex-President Brown's remarks "Observations in Continental Europe," aside from being extremely interesting, was most opportune, opening, as it does, new channels for thought and discussion of the many intricate and important features (particularly the conflagration hazard) in connection with the fire insurance business. In the matter of building construction, there is much in his address that we can well afford to heed and give the utmost consideration, for, while it brings most forcibly to our attention how extremely lax we are in building regulations and requirements, he has, in my opinion, been lenient in his comparisons. Like him, I had the pleasure, during my absence from the United States last summer, of making notes from personal inspections and observations, of the extreme care exercised in the matter of building construction, with the view of reducing to a minimum the origin of fires, and confining their scope. As year after year has rolled by, the fire waste in the United States, despite the constant increase in modern, or so-called fire-proof structures, has steadily grown, until now, we are appalled at the enormity of the figures showing the losses for each twelve months. Page upon page has been written on this subject, urging the creation of State and municipal laws relating to the construction and maintenance of buildings, which,

were they rigidly enforced, would tend to materially reduce the individual and the conflagration hazard which exists to such a marked degree in all American cities, and would lessen to a great extent, the average daily loss. That these conditions are becoming more and more apparent, and require the most careful consideration, is fully evidenced by the fact that for the first time in the history of the United States, they have been deemed of such importance as to be brought to the attention of President Roosevelt by the National Board of Fire Underwriters, and he has agreed that they shall be included in the subjects to be considered by the National Conservation Commission. Thus, while much has been done toward bringing about the fast-growing necessity for more stringent laws, and the more rigid enforcement of existing statutes, the lack of concerted and determined action by the officials of all our States, has left the situation one that, while it has in a measure been improved by the gradual increase in numbers of mercantile and other buildings of modern type and of slow-burning, or fire-proof construction, has been offset by the many buildings of inferior construction, which have been erected in the same block, or as is so often seen in our cities, by the remodeling of old buildings for occupancies other than that for which they are adapted, without due regard to the fire hazard. As an illustration, let us take Oakland, whose entire business section is, in my opinion, of the most inferior construction, showing the greatest physical defects and deficiencies, and offering probably the worst conflagration hazard of any city on the Pacific Coast. Here we have a few modern buildings surrounded by blocks of structures of very poor construction, many of which have been altered a number of times and come under the category of the conflagration breeder to which I have just referred, viz.: old buildings remodeled for occupancies other than that for which they are adapted. Buildings have been hastily fitted with machinery for manufacturing purposes, with no thought whatever of the menace they are to themselves or surrounding property. Nickelodeons, cheap theaters, penny arcades, etc., are scattered through almost every block, and constitute an ever present hazard to the whole city. In Europe, and to a great extent in Great Britain, this would not be allowed under the municipal laws and fire ordinances, and they should not be permitted here. There they build with the idea of confining a fire to one room, even in a dwelling. How different it is with us. Speaking of dwellings, they are mostly of stone, have outer walls one to three or more feet thick, with partition walls from eight to fifteen inches and more in thickness, and the general excellence of the condition of some built over a century ago is a commentary on the honesty and thoroughness of the builders of those days. This recalls an experience I had in Edinburgh. While walking through the

residence portion of that city with my friend, whose home city it is, he pointed to a row of stone dwellings, and as we had been discussing American homes, he asked "Fu auld wad y' think those biggins?" We were in front of them at the time the query was made. Therefore, I had every opportunity to look at them carefully. After a few minutes spent in scrutinizing the buildings, I answered him "Between eight and twelve years, probably ten years auld." With a laugh he replied, "Ye dinna be a gude gesser. Ah, mon, they be at least one hundred years old." This naturally induced me to look closer at the buildings, but in so far as evidences of old age and depreciation were concerned, they were not noticeable, and to me the buildings did not appear any older than what I had guessed. Now, while we must admit that conditions alter cases, and that on this Pacific Coast frame dwellings and buildings will always be in evidence, yet can it be said that the construction of them insured permanency, and the hazards emanating from defective chimneys and hearths, and the desire for hasty completion, had been sufficiently considered as to reduce, in the greatest degree possible, the danger of fire? I do not think so. In Mr. E. C. Richards' (United States Manager of the North British & Mercantile) address at the last annual meeting at Chicago of the Fire Underwriters' Association of the Northwest, I note a remarkable statement, to wit, that a friend had stated that in a large University town in England, recently visited by him, a professor in the University remarked that during his twelve years of residence, there had not been a single instance of the fire engines, having left their houses.

The question is often asked "Why is it the amount of fire loss in the United States is so much greater than that of other countries?" There is no denying the fact that from such statistics as have been published, the per capita loss in the United States is alarmingly greater than in other parts of the world. Why should this be so? Criticisms of the general deficiencies in our buildings, and defects in our building laws offer an explanation in part only. The deplorable lack of enforcement by our municipal governments of regulations relating to the construction of buildings is very largely to blame, and is in marked contrast with the conditions existing in European cities, where the insurance laws require the erection of stone and brick buildings only, and these laws are enforced. There an important feature in connection with the construction of a building is the ever present inspector, in some cities called building police, who, during the construction period, is ever alert, and at times, seems exacting in his demands for full compliance with the laws or building regulations. An instance of this vigilance came under my notice during my brief stay in Paris. I had been granted permission to go into a large stone building well along toward completion, and which was to be occupied as a

hotel. When going toward the center of the building I noticed some men gesticulating and talking, and as I approached them, it was apparent that something was wrong. It developed that the inspector had detected some faulty work in the installation of the electric wiring, and had ordered it rectified. The man to whom he was directing his remarks, evidently the contractor, being reluctant to carry out his instructions, he, with the assistance of a workman, took out the wiring, the installation of which he had criticised, and instructed that it be encased in a proper conduit, and the work done as he had directed. Chimneys and fireplaces, and even the setting up of stoves, come in for most rigid inspection. I consider defective electric wiring is the greatest source of fires in the United States, and one need not be surprised that such is the case, when he sees such a marked contrast in the installation, and in the enforcement of the regulations governing the wiring in our cities, as compared with foreign cities. There the work is done by competent workmen, who, though fully qualified to undertake and complete the wiring of a building, must do it in such a manner as to satisfy the inspector. Here it is not uncommon to see boys and men on a job, who inquiry will reveal, are in many cases novices and wholly incompetent technically to properly fulfill the duties, and often the wiring is not inspected during and after its installation, by a thoroughly reliable, capable and practical man. Is it any wonder, therefore, that where such conditions exist, we are obliged to so often insert in our proofs of loss, "Defective wiring," "Supposed defective wiring," or "Crossed electric wires," when giving the origin of a fire? Another potent factor in increasing the extent of, and damage done by fires in the United States, is the existence of such a large per cent of defectively constructed, and non-fire-resisting roofs. That the rapid spread of the fire in San Francisco in April, 1906, was due in a great measure to this cause, I do not hesitate to say. On that occasion, I crossed each day from Alameda to San Francisco, and being inside the fire zone, I had every opportunity of watching the progress of the flames, and making such mental and written notes as I desired. In the cases of the brick buildings with inferior roofs and unprotected skylights, the structures seemed to suddenly collapse and melt out of existence, as it were, apparently before the onrushing flames had attacked them. Explanation of this is that the roofs had taken fire from falling burning brands, or the terrific heat, and in this manner, became furnaces within their walls, and were thus practically destroyed before the fire itself actually reached them. I recall a similar experience in Seattle, when from different points of vantage on Third avenue, I watched the destruction of the business portion of that city in 1889. In this conflagration, it seemed as if the brick buildings were demolished in less time than were the frame structures.

With this, and the later experience in the San Francisco fire, as examples of the hazards of buildings with inferior roofs, unprotected skylights, etc., it should behoove us to use our utmost endeavors to prohibit for all time the construction of such roofs, particularly in San Francisco, where such a golden opportunity exists for restoring the city with buildings of modern type and fire resisting qualities. With our experiences as object lessons, we have everything to forcibly impress upon us the wisdom of action being taken to prevent, to as great a degree as we can, the possibility through faulty construction, of a recurrence of a catastrophe such as devastated the city of San Francisco. As a result of the conflagration in 1906, many defects in material were exposed, particularly in respect to the various kinds of stonework. Granite, limestone and in some cases sandstone proved wholly unsatisfactory, being so badly damaged by the heat as to require replacement, partial or complete, in nearly every instance. Marble fronts and stairways also developed serious defects, and in the case of steps, it was demonstrated beyond question the absolute necessity of metal supports underneath. Defective flooring in steel frame buildings was another of the structural defects most noticeable after the fire. Hollow tile flooring when not reinforced, was practically worthless, permitting, as it did, safes to crash through from upper stories to the basement. One of the best examples of this defect which came under my notice was in the Mutual Life Building on the corner of California and Sansome streets. In this building a safe crashed down many stories, leaving apertures almost as large as an elevator opening for the flames to shoot through. Pressed brick and common brick walls in which cement mortar was used, i. e., honest brick work, proved conclusively that as a fire-resisting material, it is superior to the various kinds of stone, and the only reliable barrier to check the spread of flames. Of reinforced concrete buildings, we did not have any in the fire zone. Therefore, an opinion based upon experience in this conflagration cannot be formed as to the fire-resisting qualities of this class of structure. We must also have demonstrated the adaptability and suitability of the various kinds of crushed rock and other materials used in the mixing of the concrete, together with the sand used here, for the production of a first class structure of stability and durability. In the case of foundations, it was clearly proven that in San Francisco, where the earthquake hazard has to be considered, the foundations should be most homogeneous in construction.

It has been argued that concrete foundations on piling are superior to any other. I do not wholly concur in this, my ideas having recently been changed. I believe that well-burnt brick, laid in good cement mortar on piling, or other good base, is as durable and serviceable as concrete. As an illustration of

this, and to support my statements, I would draw your attention to the foundations recently removed from the site of the old Balfour, Guthrie building on California street and from the west wall of the destroyed building of the New Zealand Insurance Company. These foundations were put in over forty years ago, and were of good brick, laid in cement mortar, all resting on massive timbers placed horizontally. These timbers when taken out were found to be as sound as on the day they were put in. A careful examination of those walls showed that they had sustained no damage from the earthquake, and despite the fact that the ground was wet all the time, were so solid as to defy attempts to break them with picks or sledges. Drills and sledge hammers were finally used, and the foundations pried out in small sections. The solidity of those walls spoke volumes for the honesty of the work in their construction. The objection to this class of foundation is, however, that it is more expensive than concrete, inasmuch as the excavations have to be considerably deeper and require a much wider base terraced to the width of the proposed walls. From inquiries made in this matter, I find that the relative cost is in the ratio of 5 to 3.

Another foundation that has just been exposed to view, the debris of the ruined building having been removed from it within the past month, is on the site of the Fair building on Montgomery street next to the Mills building. These, and other examples of foundations put in many years ago in San Francisco will suffice, I feel sure, to convince in a great measure, even the most skeptical. From the foregoing illustration, it is apparent that as an all round building material, durability and fire-resisting qualities considered, and from an expense point of view, a well-made and properly burned brick, laid in good cement mortar, is the superior of all materials.

What Effect Should Different Materials Have on Rates?

Assuming that my claim of superiority of brick as a building material is correct, and taking into consideration the object lessons presented at the time of, and immediately after the conflagration in San Francisco, when the walls and remaining portions of destroyed buildings, and those gutted by fire, cooled off, exhibiting many serious defects in all building material, other than brick, the question presents itself, "Should not differential rates be applicable when computing the special rates on new buildings, having exterior walls of brick, granite, sand or other stone. Personally, I am convinced that this should be done. I believe I am not in error when I state that on this Coast, there is no scale of charges for different materials. A steel frame building of fire-proof construction, with exterior or panel walls of granite, sand or other stone, takes the same rate as an equally well constructed building, whose panel walls are brick, with sills, cornices, etc., of similar material, or im-

proved terra cotta. I am opposed to this rule, and believe the time has arrived when we should revise our rating schedule for various mercantile buildings. Taking the results of the Baltimore and San Francisco conflagrations as guides, I should grade building materials as follows: First, brick, or brick with improved terra cotta facing. Second, reinforced concrete. Third, sandstone. Fourth, marble. Fifth, granite No. 1. Sixth, limestone. Seventh, granite No. 2. In support of my contention in this respect, I will take as examples for comparison, the following buildings, as they appeared after the fire of April, 1906: Merchants' Exchange, Mutual Life, Union Trust, Mills, Crocker Woolworth Bank and Flood building. In this I shall forego reference to steel frames, etc., and confine my criticisms to the exteriors. The brick walls of the Merchants' Exchange were but slightly damaged and otherwise discolored, but aside from some cracks in the east and rear walls, showed no serious structural defect as the direct result of the fire.

The Mutual Life Building, admitting its inferiority structurally, was, with its heavy columns, caps and bases of granite, badly wrecked. While the upper half of the building has been taken down, the damage to the granite caps and bases can still be seen and estimated by visiting the building, and viewing that portion left standing and at present occupied. In my opinion, it affords the very best lesson of the great damage that can be done by fire to semi-coarse and coarse-grained granite, of any building that was destroyed in the April, 1906 conflagration.

The Mills Building having no granite or sandstone bases, caps or sills, but having marble base and front to the second story, showed to much better advantage. The time and expense required to restore the broken marble facing and ornaments was nominal. The Union Trust Building, on the corner of Market and Montgomery streets, had granite columns, bases, caps and sills, and while the brick work is only blackened and will require cleaning with sand blast, or other modern process, the damage to the building exterior is very heavy, due to the fact that a large proportion of the granite work has had to be replaced. The time occupied in this work alone has been over three months and the cost approximately \$25,000. The Crocker Woolworth Bank Building on the opposite corner has panel walls similar to those of the Union Trust Building, and has granite facing to the second story. Yet, despite the fact that this latter building covers a much larger area and has far more granite in its grade and second story walls, the time consumed in replacing the stone work was about one-half that of the Union Trust Building, and the cost correspondingly less. Explanation of this is, that this building has curtain walls, or walls supported by the structural steel frame at each story. The Union Trust Building has bearing, or self-supporting walls, i. e., walls independent of the

steel frame. The walls in the Crocker Building being supported by the steel frame, it was possible to take out any piece of granite and replace it with new without fear of any parts sagging and causing further damage to the building. The walls in the Union Trust Building being self-supporting, this is not possible, necessitating the strengthening in turn of each portion of the wall where the granite blocks had to be removed and replaced with new pieces.

The Flood Building, like the Kohl Building, has exterior walls of good quality of sandstone. While its interior was gutted by the fire, the exterior fronts withstood the great heat, the damage thereto from that cause being but nominal. It is apparent from these examples, that if the different buildings named were of the same class, the only difference being in the material used in the panel walls and exterior finish, that those having the largest proportion of granite No. 1 and No. 2, or limestone, would show a correspondingly greater damage. If subject to a fire of any magnitude marble facing, bases and exterior finish showed to better advantage than the foregoing stones and materials, with resultant damage correspondingly less. Therefore, in my opinion, the rates applicable to each should be graded accordingly.

Consistency in Ratings.

Having referred to the matter of rating, I shall diverge and dwell briefly on this subject. Now that San Francisco is fast assuming a normal condition, business-wise, and the down-town section is being rapidly rebuilt, new rates have been published and old rates materially reduced. I am much interested in rates, and after noting some of those recently published, am inclined to think that we are not altogether consistent in fixing them. For purposes of comparison, let us take the Emporium Building, the rate on which was, after its completion, and the sprinkler equipment installed, reduced from \$1.10 to 25 cents, and contents from \$1.10 to 63 cents, 80 per cent co-insurance clause. In the insurance district, we have the beautiful stone building of the Bank of California, the rate upon which is 40 cents; contents 60 cents. These buildings are of steel frame fire-proof construction. While the exterior walls of the Bank are stone, and the Emporium of brick and sandstone, and giving due consideration to the fact that the third story of the Emporium is divided into ten sections, the dividing walls of which are parapeted, there can be no doubt as to which is the superior building of the two. In the Emporium is an enormous stock of all kinds of a more or less inflammable character. To this add the additional hazard from the restaurant, furniture setting-up and upholstering rooms, and the numerous other features usual in risks of this kind, and we have a general hazard that is very apparent. I argue that despite the sprinkler equipment, a fire could do more damage to the Emporium building than a

similar fire would do to the building of the Bank of California, with its high wainscoting of marble and metal furniture and equipments, yet, as beforesaid, the rate on the Emporium is 25 cents and the bank 40 cents. In the case of the Bank building, we have an example of one of the class of buildings I have referred to as being, in event of a conflagration, so susceptible to heavy damage through the spalling of the beautiful Ionic granite columns, which are the striking feature of its handsome exterior. This, and all other material points considered, and looking at it from an underwriting point of view, and allowing for the argument that the rate on the Emporium is in a measure competitive, I submit the question, "Which is the more desirable risk of the two? The Emporium at 25 cents, sprinklered, or the Bank of California at 40 cents?" Personally, I should unhesitatingly say, the Bank. The only deficiency in this building, from a rating point of view, is the absence of wire glass in the windows, which is to a certain degree, however offset by the fact that all such openings are well protected by ornamental iron window grillage.

As a matter of interest, I shall mention the new risk of John A. Roebling's Sons Co. This building is situate on the northeast corner of Folsom and Hawthorne streets. It is a five story, steel frame, with reinforced concrete walls, protected openings and all modern improvement. It is thoroughly equipped with standard sprinkler system, and is classed A-1. The rate on this risk, with the 80 per cent co-insurance clause is, building 14 cents, contents 28 cents; with the 90 per cent co-insurance clause, the building rate is 13 cents; contents, 26 cents.

Having drawn your attention to the foregoing risks in San Francisco, I shall now refer, for comparison, to two other risks, one in Seattle, Washington, the Macdougall Southwick Co., the other in Los Angeles, California, the new Hamburger store. Both are department stores, but it can be said in favor of the one in Seattle that it does not embrace all the features of the usual modern department store, and is about one-fourth as large as the Los Angeles risk. The Macdougall Southwick risk is situate on the corner of Second avenue and Pike street. It is five stories in height, and is rated class A. It is thoroughly equipped with sprinkler system. There are about 12,300 square feet per floor in this building, as compared with 73,000 square feet to a floor in the Hamburger store in Los Angeles. In the immediate vicinity of the Macdougall Southwick risk are several hydrants on 6, 8 and 12 inch mains. The rate on this risk is, building 19 cents, contents 47 cents. The new Hamburger store is situate on the corner of Broadway and Eighth streets. It is eight stories in height, of steel frame, fire-proof construction, all brick exterior, protected openings, wired glass in windows and thoroughly equipped with sprinkler system, and as before said, contains

about 73,000 square feet per floor. In the immediate vicinity there are only four hydrants, viz.: two on the corner of Eighth and Broadway (one old and one new), and two on the corner of South Hill and Eighth streets (both old.) The mains are 4, 14 and 16 inches. The rate on this risk is, building 21 cents, contents 72 cents. Adverting again to the Emporium, it is, as before stated, of steel frame, fire-proof construction, with outer front walls of brick and sandstone—a really first class building in all respects. It also has been provided with the very best of modern Grinnell sprinkler systems. This building is five stories high in front, extending back sixty feet. The remaining portion, reaching to Jessie street, is 340 feet in depth by 275 in width, and is only three stories in height, the third floor being, as hereinbefore stated, divided into ten sections. In the basement, which is one area, there are 103,000 square feet, and 83,500 square feet in each of the first and second floors. In close proximity to this risk are at least twenty hydrants, on mains from six to twenty-two inches. There are no buildings within 300 feet on the west, and those adjoining it on the east are of modern, fireproof construction. At the rear is Jessie street, forty feet wide. Comparing these risks from an underwriting point of view, we find that while the Macdougall Southwick store is much smaller, it is situate in about the heart of the conflagration district of Seattle. The block in which it is located is built up of inferior brick structures, and the occupancies of many of the grade floor spaces being five and ten cent theaters, nickelodeons and penny arcades. The rate of 19 cents on this building is, in my opinion, much too low, for, if we are to heed the oft-repeated warnings of conflagration hazard, nineteen cents is hardly sufficient to cover that hazard in this case. Yet, it is rated six cents lower than the Emporium. The Hamburger risk in Los Angeles is situate just beyond the business section, on the edge of the conflagration district, and in a block, the buildings in which are principally small, light frames and not offering serious exposing hazards. It is, however, eight stories throughout, and does not begin to have the water protection the Emporium has, yet it is rated 4 cents less. Having made my comparisons of these risks, I shall ask your apology for referring again to the Emporium. I have called your attention to the water protection as at present existing in the vicinity of this store. Good as it now is, it will ere long be much better. I have in mind the intention of the city to spend over five million dollars in establishing a high-pressure water system, with three reservoirs of immense capacity. Two modern salt water pumping stations on the shores of the bay, and two powerful modern fire boats are also contemplated. These, together with the rein-

forced concrete cisterns of 100,000 gallons capacity now being constructed in different parts of the city, will form a fire-fighting medium second to none in the world. Now, assuming that the majority of Companies do not consider the present rate on this risk too low, will they still be satisfied, when the new high pressure and salt water systems are completed, to further reduce these already low rates, in response to the application of the assured for a reduction, on the ground that the conflagration hazard has been lessened and the sections of the city covered by these new systems practically rendered immune from conflagration hazard? I may be picturing the future too far, but if we are to base our calculations in this respect on the ratio of reductions already made, it is not unreasonable to suppose that such action will be taken and the rates further reduced. I contend that we have already exceeded the limit of sound judgment in the instances mentioned, and venture the warning that if we continue the system of rating sprinklered risks of this and other classes, we shall so reduce our premium income under these classes as to make them undesirable and unprofitable from an underwriting standpoint. One of the largest individual classes of risks on this Coast is the saw-mill and lumber plant. Until recent years, none of these plants were sprinklered. Now, however, the larger and better mills are being provided with sprinklered systems, according to the extent and efficiency of which the rates are correspondingly reduced. Time will determine the supposed wisdom of these heavy reductions in rates, and whether or no the sprinkler equipments in saw mills in this territory are as efficient and effective as we have been led to believe, particularly in those built on piling, and I might state that the majority are on piling. Personally I doubt their efficiency. The open construction and general character of the plants militating against their successful operation. I will venture the opinion that in many cases, the fire would gain such headway as to fuse in excess of forty heads, or the maximum number of heads in one open area, which an equipment is designed to supply, with result that the mill or plant might prove a total loss. Another important feature in connection with sprinklers in saw mills and wood-working plants, is the collection of fine sawdust, which has become moist from the wet flooring above, and which dust collects in the cups of any head designed on the same general plan as the Grinnell sprinkler head, thus preventing, in my opinion, the prompt fusing of the head should fire occur. Since May last, the destruction by fire of over thirty sawmills and wood-working plants on this coast has been reported. The question is naturally asked, What is the cause of this great mortality in this class? Who is there who can answer intelligently? Over-

crowding, machinery neglected and dust coated, and out of alignment, dirty and congested condition of the premises generally, have been my observations. For these reasons, and if experience had shown that in cases of claim for loss, requiring settlement by law, justice had been had, or could be expected in the ruling of the Courts, or the verdict of the jury had been in keeping with the facts submitted, and in support of the claim of violation of policy conditions, or of special agreements or warranties governing the granting of reduced rate, I should advocate credits in the rating schedules, for weekly inspection and report on the plant by the superintendent or foreman, as to its condition generally, and that of the sprinkler system. Also, whether or not all the warranties embodied in the policy contract had been rigidly enforced. If we could enforce this, or some such requirement, which, let us hope, will soon be compulsory as a State law, I feel sure it would not be long ere the present wholly unsatisfactory condition of our lumber plants would be gradually improved, with result that our Board surveyor or inspector would be able to report numerous plants whose system of operation and standard of maintenance would be on an parity with that of the model plant of the Potlatch Lumber Co., at Potlatch, Idaho. Another class of risk on which I consider the reduction for sprinkler equipment excessive, is the raisin-packing plants, particularly those in the San Joaquin Valley. The period when these plants are in active operation is during the hot summer months. In Fresno, and other parts of the San Joaquin Valley, the average temperature from July to September is about 105 degrees. Besides this excessive climatic temperature, we must consider the additional hazard from the furnace and engine and boiler room, and under the climatic conditions referred to, we have confronting us, a danger that cannot be too seriously considered. In judging these risks from an underwriting standpoint, it must be borne in mind that a majority of them are of frame construction, the material used being mountain pine lumber. This class of structure depreciates quite rapidly, and, aside from this characteristic none are so substantially built as to obviate the necessity for constant attention to the machinery, shafting, etc., installed therein. If the sprinklers are arranged to fuse at the high temperature of 155 to 165, I argue that should a fire originate from back draft from the furnace room, or from any cause producing a sudden burst of flame, the fire would travel so rapidly before the sprinklers could successfully check it, as to envelope the entire structure. Again, should a fire start in the room where the steamer is in operation, I am satisfied that from the exceedingly inflammable nature of the raisin stems, the flames would leap so rapidly as to get beyond the control of the sprinklers. It must also be borne in mind that in this class of risk the dust that is created

through the operation of the steamer machinery is considerable, and unless the utmost care is taken of the plant and premises, the machinery, shafting, etc., becomes coated with fibrous dust, creating a hazard that is apparent, and which must necessarily be given careful consideration from an underwriting point of view. No doubt my statements will be combatted by many, who incline to the belief that a sprinkler equipment when properly installed and maintained in a plant, so materially improves the risk, that its installation cannot be regarded too highly when considered in connection with the rate to be applied thereon. This contention may be admissible in a majority of cases, but in so far as sawmills, particularly those on piling, and the raisin-packing plants are concerned, I am of the opinion we have overstepped the bounds of sound underwriting judgment in our generous reductions from schedule rates on risks of these classes. I believe a penalty should be included in, and made a part of the sprinkler warranty, and its enforcement insisted upon. I appreciate fully the great difficulty that attaches to the application of schedule ratings so as to be consistent, and to eliminate to as great a degree as possible, any opportunity for just criticism by comparisons that must be accepted as fair. I have brought to your notice certain specific risks of similar construction and occupancy, and referred to other classes of hazards, not for the purpose of criticism, but in the hope that they will serve as problems for consideration and discussion, believing that more general discussion, particularly by special agents, of the various intricate features in connection with modern buildings for all classes of occupancy, from a fire-resisting standpoint, and the schedule and tariff ratings applicable to each, will result in incalculable benefit to our business interests, and an earlier solution of the problem of consistency in the application of schedule ratings. To so improve and simplify the formula for ratings as to make them easily understood by the insuring public, to end that the insured are taught that the better they build, and the more they improve and care for their own fire risks, the less will be the individual and conflagration hazard, the reward for which action will be satisfaction in the knowledge of more general safety and insurance at correspondingly reduced cost. (Applause.)

The President: Perhaps no higher compliment could be paid to any man than the rapt attention paid to Mr. Tiedemann in reading this paper. I noted particularly the attention that Mr. Lee McKenzie, of Seattle, gave to the reading, and I would like him to explain why he made a nineteen cent rate on the McDougall & Southwick department store. (Laughter.)

Mr. McKenzie: I listened with a great deal of interest to Mr. Tiedemann's paper, and I don't think that I could add anything to it in any way whatever. His comments upon the trimmings of buildings were certainly well stated, for I happened to visit San Francisco a few months after the fire, and I saw plenty of evidence of the partial or almost total destruction of the trimmings to buildings that were left standing, and, as he says, a good, old, solid brick wall laid in cement mortar with terra cotta trimmings, cornices, etc., if it is necessary to put them on, is the best construction that you can get. He did not enter, however, into interior construction of a building of that class; but that would have to be, to follow it out still further, steel frame on the inside, with either reinforced concrete floors or hollow tiled floors, and the outside wall made independent of the steel structure; not, however, a curtain wall. Now, then, when the fire comes along, there is a solid brick wall, laid in cement mortar, that is almost impervious to the attack of the flames and heat, and it has got to stop, provided there is the proper protection for the openings. I don't know that I can make any further comment upon the paper, but he has criticised me rather severely on the McDougall & Southwick rate, and I am afraid that he is correct. (Laughter.) It is a poor man that will not admit an error that he may have made. Now he says that the McDougall & Southwick store is in the heart of the conflagration district. That is true. But from the side from which that conflagration would perhaps come, the south side or to the east, there is a solid wall on the south without any openings whatever. There is a sprinklered risk across the street from it, and to the east, where the openings are, the windows are all of wire glass and metal frames, and over each one of those openings is a sprinkler head. The fire could not get in—provided the sprinklers worked—from the east side. I doubt if it could get in from the south side, and I think the sprinklers in the risk across the street, which is eighty-four feet wide, would stop a fire originating there from spreading across the street. Now, as to the conflagration end of it, when it gets started you never know where it is going to stop, and it does not make a particle of difference whether the whole town is sprinklered, or most of it wire glass construction. The good construction may, per-

haps, retard it, but only for a time. I think the McDougall & Southwick property is a pretty good risk, as in addition to the protection stated it carries the one hundred per cent co-insurance clause on the building and ninety per cent co-insurance on the stock. The protection is all that you can ask, not only from the sprinklers but from everything else that goes to make up proper protection of that kind. They have a day watchman and three watchmen at night patrolling the building all the time, a complete set of watch clock stations, etc., besides the A. D. T. system, and if the watchmen are not on duty five minutes afterwards a messenger is sent up to find out what the trouble is. (Applause.)

The President: Mr. Wellington, we would like to know why you recommend such reductions in rates on account of sprinkler equipment.

Mr. Wellington: Most of you know that the early years of my career on California street were spent in the insurance business, and the experience gained at that time is very valuable in the prosecution of my present work. Probably my views on sprinkler protection vary considerably from those of other installers who have not had an underwriting experience. To my mind you are all sprinkler crazy. You think that a sprinkler equipment put into anything will save it, and there is a fine field among insurance men in selling them equipments to protect—against the fires of the hereafter. Sprinklers are installed many times without regard to the hazard. Take, for instance, a paint and oil stock, which may be effectively controlled as long as none of the oil takes fire. If the latter contingency arises the water from the sprinklers will spread and carry it through the building. To illustrate, I might mention the very interesting experiment at Santa Cruz after the sprinkler test, where we demonstrated the fallacy of depending upon the sprinkler equipment or steam for oil fires. It was the intention to protect the crude oil plant, and a scheme of forcing steam into the tank for smothering a fire had been evolved by the engineers of the company. It is useless to argue in such a case. You must show them. We spread half a barrel of oil on the sand, set it afire, and then asked them to first apply steam and then water. Those men should have known in advance that the application of dry steam would introduce more oxygen and aggravate the fire, as dry steam is used for

spraying oil under boilers to get proper combustion. Streams of water were applied and caused the oil to boil and flow more freely, the water acting as a conveyor for the oil. After they were convinced that the applications would not be effective. It took but two or three turns of the stream from a three-gallon carbonic acid gas extinguisher to put out that half barrel of oil which was blazing where sprinklers would have spread and aggravated it.

Looking over the copy of the proceedings of last year, I find that in my paper I touched on the same things in a general way that Mr. Tiedemann has treated in detail. "The fundamental principle of fire protection is the elimination of causes of fires; second, the reduction to a minimum of combustible materials; third, the confining of fires as much as possible to points of origin; and last, the provision of means for ready extinguishment." There is where a sprinkler equipment should come in, instead of being relied upon to protect any old thing. You find in almost every instance that the underwriters on the Coast—now, I am not going to mince words at all—jump at any risk that has a sprinkler equipment in it. They pay no attention as to what will occur to the buildings from outside fires. You will find many sprinklered risks in this town that are badly exposed by other buildings. Wire glass does not eliminate the exposure hazard. You will find that the architects in this town have simply gone crazy over wire glass. The mutuals have made their great success on sprinklered business by taking isolated risks not subject to conflagration hazard. Sprinklers were not intended to stop the conflagration, but to check interior fires in their incipiency. You will get some eye-openers in this town yet, because owners of sprinklered buildings have not been impressed with the importance of protecting themselves against outside fires. I dwelt upon that subject in my paper last year and mentioned certain buildings that had burned from the exposure fires. At Santa Cruz there was as much attention paid to the outside hazard as there was to their interior protection. A fire on the outside of those buildings getting under headway would not be stopped by any automatic sprinkler equipment in existence. While I like to sell sprinklers, I also charge people

for information in minimizing fire hazard and making conflagration-proof risks.

You don't discriminate between the different classes of protection or maintenance. I have in mind now a plant which I inspected after leaving the Phenix of Brooklyn, and found that the sprinkler equipment had been shut off for eight months. A line of belting had broken and carried away some of the piping. To stop the flow of water they naturally closed the gate valve. Instead of the proper care of equipment being one man's business, the repairs were neglected and it remained in its useless condition until I visited the plant. If a loss had occurred you would still be wondering why sprinklered risks burn. I have established a system of reports for all the buildings that we have equipped, making it incumbent upon the men in charge of equipments to report directly to my office. It was just a short time ago that a weekly report was received from the West Side Lumber Company at Tuolumne, stating that the same had been "no sprinklers altered from their original positions." Mr. Robertson's report showed that a few of the heads had been jammed up between the joists, rendering them inefficient to check or control a fire, had one occurred near them. It was only necessary to draw the attention of the management to the defect to have it remedied at once, and the man in charge cautioned about the accuracy of his inspections and reports. The practice in the past has been to take a sprinklered risk regardless of the character of the equipment.

You have lots of equipments here that were put in long ago, and you are giving them practically the same reductions in rates as are granted Standard plants for fear of a little competition. This bog of competition is carried too far. You have competition up North, the Mill Owners Company and a few of those other concerns that you are paying entirely too much attention to. If you will just let the local Mutual Companies alone, they will die a natural death, because they cannot continue along the lines that are being followed. Their equipments in many instances have not been up to Standard, and it will only take a few fires to cut their careers short. You have not yet had the real competition of the Eastern mutual companies such as the New York, or rather the Hartford and the Chicago

Association have to deal with. You will be able to better risks materially, if you will spend more time in impressing people with the importance of proper construction, character of equipments and the protection of buildings from exposure fires.

The President. I would like to hear briefly from Mr. Robertson, of the Board, on this question.

Mr. Robertson. Mr. President and Gentlemen: I regret very much that the hour is so far advanced that it is impossible to say as much as might be said and should be said in the discussion of the very well expressed and thoughtful paper of Mr. Tiedemann. It will be necessary, in fact, to go very deeply into the matter in order to criticize in any fairness at all. I may say, however, that in my opinion Mr. Tiedemann has expressed some very correct opinions, and that—without criticizing the rates on the various buildings which he has cited, which would be very bad taste on my part—I may say that there is a tendency in my opinion to make too low rates on certain classes of sprinklered business. I won't mention those classes but I feel free to say that there is a tendency to try to keep very poor sprinkler equipments rated as sprinkler equipments and give them the same amount of reduction in the rate that a good equipment gets. There is a great tendency to do that, and that tendency in my opinion is too great. It should be stopped. Those sprinkler systems which are obsolete and out of date, and of no further use should no longer be considered as sprinkler equipments. I am not a rate-maker and it is very bad taste in me to criticize the action of those to whom I owe allegiance. The question of sprinkler equipped sawmills is one which is peculiar to this Coast,—that is, sawmills of the type we have now. They are enormous wooden structures filled with hazards that do not exist anywhere else. In my opinion a sawmill should be sprinklered and rated on its individual merits only, and the same sawmill which would be insured at a very reasonable rate in one place might have a very high rate in another place. All structures which are exposed to high winds and very high temperatures in summer are naturally much greater risks than those which do not have those exposures. The sawmills along the Mendocino Coast, where the air is humid, where there are not high winds, and the temperature does not rise very high are

better risks than the sawmills in the interior. And I suppose that the same thing applies to the sawmills in the Northwest with which I am not so familiar. As to the difference in rates between different buildings,—the difference, for instance, in the Hamburger risk, and the Emporium risk, I think this would explain the difference partly; the Emporium is a very large building with a very large floor space. While there is a large water supply there, still there is an enormous area, and the two floors communicate, and there is an enormous space under the dome. That might make that rate a little higher than the Hamburger rate, where there is no opening from one floor to the other floor. However, I will not go into that question.

I listened to Mr. Tiedemann's account of the foundations and the various materials used in the walls of the buildings with a great deal of interest. I think that he is correct in the main, although as to his classification of various stones, there might be a little variation dependent upon further inquiry. As to reinforced concrete I may say that is practically an unknown quantity in reference to its behavior in a fire. A great many engineers hold very diverse opinions about it, and the rest of them are holding their breath. (Applause.)

The President. I wish to call your attention to the balance of the programme. We have three of the best papers to follow this afternoon, and a large attendance is requested.



AFTERNOON SESSION.

The President: You will find in the printed proceedings of this meeting a paper on Short-rate Cancellations, involving special problems on cancellations where the rates have changed during the life of the policy. This paper will not be read here, but will be printed in this year's Proceedings, and can be discussed by those interested at the next Annual Meeting.

Our first paper this afternoon is by Mr. Staniford on "Buried Thoughts."

BURIED THOUGHTS; OR, PROFITABLE AND UNPROFITABLE EFFORT.

By F. C. Staniford.

This business of ours each year becomes more technical, is more exacting in its demands for greater individual effort to seek solutions for the many difficulties found in Underwriting, Fire Hazard, Fire Prevention and Protection, and Loss Adjustment, and as this Association is a semi-scientific body, the membership of which represent a profession requiring the highest standard of trained intelligence, I incline to the opinion that a paper on some technical subject giving the result of experience or investigation of some of our perplexing problems would be received more favorably than the discussion of a subject of possibly less importance.

It is a recent experience in individual effort, to which I will later refer, that is in part my excuse, if one is needed, for presenting a non-technical paper.

In its broad sense, effort may be said to be profitable or unprofitable in proportion as it is utilized and made beneficial. Narrowed to the individual, effort may be of considerable benefit to him while resulting in but little value to others. If he be a member of this Association and he writes a paper on some technical subject, spending time and patience, and utilizing, as is often the case, wide experience and rare educational attainments in its preparation, he will be benefited by the additional knowledge gained through the investigation necessary to reach the facts, and, thus far, his efforts are profitable. But unless his production extends its benefits to include a considerable number of students, or his investigations, experience or suggestions produce a working tool for the use of the profession, his efforts in a large measure are unprofitable.

At odd moments for a number of years past I have gathered data on the subject of Fire Hazard, and when President Gunn invited me to write something for this meeting I gathered up my notes on this subject, and, after arranging them, concluded that what had been to me a profitable study might be made beneficial to some of the members.

Having occasion to prove certain statements which I intended making use of, I called on our friend, Mr. F. J. Alex Mayer, of Portland, Oregon, who generously gave me the freedom of his valuable library, and I was soon in possession of some very discouraging information, which forced the conclusion that I had either gained the value of profitable investigation or was the victim of unprofitable effort, as, in the volume of the proceedings of this Association for 1892, I found that Mr. L. B. Edwards had contributed a paper entitled "Adjustment Before Loss," in which I found tabulated and explained much of that for which I had spent many nights of study and many days of personal investigation, and it was at once apparent that I would have to abandon my subject and seek other fields.

I had discovered some buried thoughts.

Conceiving that a further search among the papers printed in the proceedings of past years might help to supply my own deficiencies, and possibly suggest a subject, of which I was now in need, I continued my investigations into the buried past, and was rewarded by finding a host of carefully prepared papers treating in a most practical manner, and with rare ability, many of the subjects which even today are giving us much concern and for which many young Special Agents—and some old ones—are struggling for solutions, possibly not knowing that experts in the business had pioneered the field before them and had written of their experience.

Many of these papers are from the minds of some of the cleverest men known to the insurance fraternity, men who have put into the subjects treated a wealth of practical experience gained through years of actual contact with intricate problems which they mastered by close application, searching analysis and exhaustive investigation of trained minds, and presented in plain, understandable English.

Mr. Henry E. Hess, Manager of the New York Insurance Exchange, in a paper on "Making an Insurance Library," says of these papers:

"Take the Proceedings of the Fire Underwriters' Association of the Pacific and those of the Underwriters' Association of the Northwest—the two containing, in my opinion, some of the most complete and useful papers pertaining to our business that are to be found in print."

This is a valuable tribute from a gentleman highly qualified

to judge of the character of these papers. This gentleman's opinion, expressed, as it probably was, after due consideration, indicates the high position which this Association occupies in the judgment of Eastern underwriters, and it is no easy task that faces those who would attempt to maintain the high standard which has been erected by the efforts of those who have guided its destinies to the present time, and we may profitably pause for a moment and inquire if we are making the best use possible of the investigations, experience and suggestions of the men who have placed this Association where it stands today, a monument to the labors of strong, brainy men, who have put color into the complexion of the insurance thought of the age.

Believing that we are not reaping the benefits that we should from the work of those who have labored, it is my purpose to indicate something of the nature of what has been said on one subject alone, that of losses, in the hope of stimulating interest in a more careful consideration of that which has been written.

Discussion of the subjects is not possible in this paper. I can only refer to them briefly, and could not, without taxing your patience beyond reason, present more than an incomplete record of the number of loss papers found in the volumes.

From 1877 to 1883 there was an almost continuous struggle to reach an agreement and perfect a rule for the

Apportionment of Losses Under Nonconcurrent Policies.

This subject will be found treated by Mr. William Sexton in 1883, and most exhaustively handled by the same author in 1884, under the title, "Sexton & Kinne on the Apportionment of Nonconcurrent Policies." In the same volume Colonel Kinne defends the "Kinne" rule in a paper on the same subject, claiming that it fully covers the ground.

Mr. A. R. Gunnison, in the volume for 1885, writing the minority report for the Committee on Losses and Adjustments, discusses the subject of nonconcurrency under the title of "Rules for Apportionment," and recommends the "Kinne" rule as best adapted to our business.

These papers contain practically "the last word" on this subject, and the "Kinne" rule, which was adopted in 1885, is now generally accepted on this coast.

At the 1903 meeting of the Pacific Northwest Special Agents' Association, Mr. A. W. Thornton read a paper under the title of "Apportionments of Losses Under Nonconcurrent Policies" exemplifying the "Kinne" rule, in which he illustrates its practical application by a number of carefully worked out problems. The paper is published in pamphlet form, and

It should be in the hands of every Special Agent who is ambitious to succeed.

Under the title of "A Few Suggestions" Mr. Drifffield, in the 1906 volume, devotes a part of his paper to Apportionments. Under head of "Losses and Adjustments" there appears eleven papers discussing the subject in a general way, and all containing valuable suggestions.

The contributors of these general papers are: Mr. L. L. Bromwell, 1877; George W. Spencer, 1878; George D. Dornin, 1879; William Sexton, 1880; J. R. Garniss, 1882; Z. P. Clark, 1883; Mr. T. W. Fenn, for the Committee on Losses and Adjustments, in 1885; Mr. A. J. Wetzlar, in 1886, and Mr. W. P. Thomas and Mr. C. P. Ferry in the same year, also written for the committee, and by Mr. W. L. Chalmers in 1887.

Partial losses are always annoying to the adjuster, and are a constant drain on the companies. This subject is fully discussed by Mr. R. W. Osborn, in the volume for 1894, under the title of "Adjustments of Partial Losses," and in the same volume Mr. W. H. Gibbons offers additional suggestions.

That we are constantly overpaying in the adjustment of partial losses has long been recognized, and the plea made by Mr. Osborn for exactness as well as justice to both insured and insurer is well worth the attention of adjusters.

To adjust a hop loss may not present many difficult features to the experienced adjuster. But to reach the equities and make up a proper statement may give the young man some concern, and if he is located in a hop country he will find it to his advantage to read "Hops as a Fire Hazard," written by E. L. Thompson and published in the volume for 1897.

The question of depreciation is not the least of the troubles of the adjuster. Hard and fast rules are impossible of application. In most cases it is a good or bad guess based to some extent on good or bad judgment and reached by agreement between the insured and adjuster. The papers on the general features of losses and adjustments discuss this subject, and there will be found in the volume for 1890 a paper entitled "The Ethical Shading of Depreciation and Discount on Time Bills," by Mr. Peter Outcalt, and another in the volume for 1899 entitled "Brief Analysis of the Theory of Depreciation," by Mr. H. McD. Spencer.

Claim is not infrequently made for loss occasioned by a smoking coal-oil stove or lamp, and sometimes from the smoke of a wood fire in a stove, the chimney to which failed to operate and a damage to wallpaper, curtains and furniture results. This class of loss is discussed by Mr. Bernard Faymonville, in the volume for 1888, under the title of "Proper Vice," in which

he offers the following rule for guidance in determining liability. Rule:

"That the insurers' liability for loss or damage by proper vice begins only when the fire communicates to objects other than the one in which it originates. Such communication must be attended by ignition, and any direct loss or damage caused to or by the article to which the fire communicates is within the scope of the policy."

Discussion of the paper at the time indicates that the insurers, at least agreed with Mr. Faymonville.

In a paper which he called "A Celebrated Case," Mr. H. M. Grant, in 1888, discusses the Bonner Mercantile Company's loss at Butte City, Montana, an adjustment which developed more "points" and more difficulties than any loss up to that time had furnished, and it is doubtful if any loss since has approached it in this respect. Should any young man in the business conceive the idea that premium getting is his sole business, and that good, hard study is not essential, I would advise him to get this paper and read it. He will probably change his mind.

"When Shall the Adjuster Decline to Make Proofs?"

This is the subject of a paper read at the meeting in 1893 by Mr. B. D. Smalley. The opinion of an able adjuster, to which considerable objection was raised at the time, and it was made a special order for discussion for the "next regular meeting," but I cannot find that it was done. The young man in the business sometimes faces this question, as well as that vexing one of

"When to Deny Liability,"

upon which Mr. William Sexton wrote in 1902. This is a short paper and the author quotes a number of court decisions on this puzzling question.

Attachments and Garnishments.

Whether or not to accept service for the company in an attachment or garnishment while adjusting a loss is not the easiest thing in the world for the young man—or the old one, either—to determine. This question is discussed by Mr. Peter Winne in 1891 under the title of "Attachments or Garnishment Before Proofs Are Made." The author writes an interesting paper, but fails to quote decisions to sustain his position.

At the meeting of the Association in 1892 Mr. V. Carus Driffield contributes a paper entitled "Garnishments Before Proofs," in which he sustains Mr. Winne's position, that service is not effective on the adjuster, and quotes court decisions in support of his own opinion, namely, that it should be made on the managing agent.

Mr. A. J. Wetzlar, in the same volume, takes issue with

both Mr. Winne and Mr. Driffield, and in his paper, "Attachments or Garnishments Before Proofs of Loss Are Made," suggests a method of avoiding the dangers which he thinks lie in wait for one who would disregard an attachment. These papers are highly instructive and written by men of experience.

In 1898, under the title of "Garnishments," Mr. W. S. Goodfellow contributes a short but strong and thoughtful paper from the standpoint of a lawyer.

Appraisement and Appraisers.

Mr. A. J. Wetzlar discusses "Adjusters and Appraisers" in a paper read before the Association in 1891. It is a most complete and exhaustive paper on this subject, and the author, in his argument, makes frequent use of court decisions, which add value to the paper.

"Disagreement for Appraisal"

is the title of a paper written by Mr. F. G. Argall in 1900. This gentleman was considered by many as one of the most able adjusters on the Coast, and his opinion has strong claims for recognition. He says: "Until a real difference has arisen out of an honest effort between the insurer and insured, there is neither occasion nor authority for appraisal and arbitration," and he suggests "a formal expression of opinion by the Association on the highly important question of what does and what does not constitute a valid disagreement as precedent to appraisal." I believe, however, that no action was taken.

"Insurable Interest"

was discussed by Mr. F. A. Swett in 1894 and by Mr. James D. Bailey in 1880. These papers contain valuable suggestions and were favorably discussed at the time. There is also a committee report on the same subject in 1908.

"The Insurers' Liability on Buildings in Course of Construction"

is the title of a paper written by Mr. Bernard Faymonville in 1892. This is a loss paper which personally I would at one time have been very glad to have had in my possession. The paper contains information of the greatest possible value in the determination of this question. The decision of a referee in a loss of this character is given by Colonel Kinne.

Our agency force has not yet reached that state of perfection from our training but that it is still able to cause us much concern in writing policies on buildings in course of construction.

Mr. T. C. Van Ness, in 1901, contributed a paper on **"Liability of Electric Light Companies to Insurance Companies for Fire Resulting from Electric Wires."**

This is law by a lawyer. It is also a loss paper, as it comes within the scope of adjustment and is the opinion of an able attorney who has made insurance law a specialty.

The same gentleman, in 1898, discusses the "Non-Waiver Stipulation," in a nontechnical way, but fills his paper with valuable suggestions.

The same subject, under the title of "Waiver and Estoppel," is discussed by Mr. Peter Winne in 1885.

"The Association Wine Problem," solutions for which were offered by Mr. Calvert Meade, Mr. Adam Gilliland, Mr. William Sexton and Mr. D. A. Spencer, in 1898, will furnish the ambitious young adjuster some mental gymnastics and bring to his notice a few suggestions in figures which, in case he should become interested, might rescue him from the possibilities of adopting a blase view of this business of ours.

In 1901 a paper on "Adjusting Field Grain Losses" was read by Mr. William Sexton, and in the same volume the subject was continued by Mr. W. H. Lowden, Mr. Calvert Meade, Mr. V. Carus Driffield and Mr. F. G. Argall. The first three practically agree with each other, and their views are generally accepted as expounding the correct principle in handling this class of losses.

Mr. Driffie'd disagrees with these gentlemen, while Mr. Argall adopts a somewhat neutral position and is less positive in his views. The papers illustrate by carefully made up loss statements which are shorn of all unnecessary detail and are clear and explicit.

To the inexperienced the adjustment of loss under policies having coinsurance, average and other clauses, is somewhat puzzling. In 1898 a paper was contributed (author's name not given) entitled "Adjustment Under Policies Having Coinsurance Clauses of Different Ratios," in which problems are given and methods of apportionment are illustrated, and in 1902 the "Average Clause vs. 100 Per Cent Coinsurance Clause" was fully illustrated in a short paper by Mr. A. W. Thornton, who also furnished problems and solutions.

Under the title of "Subtraction," Mr. R. W. Osborn also refers to the average clause, and says some things about the "Mortgage Clause" which will give the young man in business something to think about.

"Building Losses for Beginners,"

written by Mr. Amos Sewell and published in pamphlet form in 1905, will be found wonderfully helpful to those for whom it is intended.

"First Steps," written by Mr. William Maris in 1908, contains many valuable suggestions for the use of the young man who is called upon to adjust losses. There is always a first time, and the beginner and others will find profitable reading in this paper.

In 1891 Mr. H. M. Grant contributed a paper, "Upon the

Element of Estimate in Loss Adjustment," in which he pleads for more exactness in estimating profits, saying that "it must be something more than a shrewd guess or haphazard inference." The author illustrates the danger of guessing at profits by presenting a number of problems showing a largely increased loss by the use of inexact methods. It is a paper indicating deep study and careful preparation, and is one of unusual value.

Not every loss is a book loss, but there are few if any losses in which a loss statement can be dispensed with, as it is a most important part of a properly prepared proof of loss.

Fortunately for the young man in the business today, this question of loss statements and the proper treatment of inventory, purchases, freight, sales, profit, discount and depreciation, and the many other items that enter into the problem of showing the net loss to the insured, have been explained and illustrated by Mr. W. H. Lowden in his paper, "Adjustment of Book Losses," in 1887, and in "What to Do When the Books are Burned," by the same author, in 1890, and by Mr. William Sexton in "Adjusting," in 1891, in which he appears to agree with Mr. Lowden. In 1900 Mr. Sexton added "Profit and Freight in Book Losses," and in 1905 Mr. F. J. Alex Mayer exhaustively discussed the papers of both Mr. Lowden and Mr. Sexton in a paper entitled "Scientific Bookkeeping and the Adjustment of Book Losses With and Without Books."

Mr. Lowden's two papers, Mr. Sexton's "Adjusting," and Mr. Mayer's paper were all published in pamphlet form.

With this splendid material before him, there is no reason in the world why the young man, if he will study, should not be able to add greatly to the sum of his knowledge and present loss statements which will bear the closest scrutiny.

"The Measure of Manufacturers' Damage"

Is the title to a paper read before the Association in 1891 by Mr. W. H. Lowden. The author quotes liberally from court decisions to sustain his contention that "the market value of the manufacturer's finished product less the cost of realizing this amount is the true measure of the manufacturer's loss." He illustrates what items, in his opinion, should be taken into account in this matter of expense of marketing the product.

In 1904 Mr. William Maris attacks the subject under the head of "Manufacturer's Cost of Replacement," in which he argues and quotes decisions to sustain him in his opinion that the cost of production is the proper measure of indemnity on manufactured articles.

This question was fully discussed at the time the papers were read and suggestions were offered tending to dispose of the matter by reaching some decision, but nothing resulted,

though it is possible that the discussion may be responsible for the fact that at the present time the forms, both general and specific, on lumber of some of the larger mills in the Northwest contain the following clause:

"It is understood and agreed that loss, if any, on lumber and other timber products shall be estimated on the basis of the cash market value thereof at the time of fire."

I do not know that any of the companies have refused to write their line because of this clause.

"The Cost of Manufacturing Lumber and Shingles"

is the title of a paper read by Mr. A. W. Thornton in 1906. Probably no man in our business on this coast is in possession of as much knowledge on this subject as Mr. Thornton, and his paper should be in the hands of the adjuster for any company requiring the loss statement to be based on the cost of production, as it contains the facts which he should have to enable him to handle a lumber loss where cost of production is made the measure of damage. The author concludes his paper with suggestions of deductions from market price of such items as loading, traveling salesman, cash discounts, depreciations, and difference in price between carload lots and large quantities.

Mr. William Sexton, in 1908, discussed the subject of "Adjusting Lumber Losses," in which he offers some points not before touched upon. He presents figures showing the book statement of loss at cost to produce, shows inventory, sales and profit by grades, and the cash value at the time of the fire.

I wish that I might quote more liberally from this paper, as the subject of the measure of manufacturer's damage is one which should be settled.

Mr. Sexton concludes his paper by saying: "Underwriters on products in hands of producers could save adjusters much work, much worry and the companies much money, by agreeing to base the claim for loss on cash market value less 10 per cent, and the expense of converting the products into coin."

Mr. Driffield, in "A Few Suggestions," written in 1906, touching on "Manufacturer's Indemnity," suggests the use of a specially worded three-fourths value clause as a limit of the liability of the insurer.

Possibly interest in this subject may some day reach a stage when the companies will consider it advisable to seek some basis of agreement.

At the time these papers were read, brief and informal discussion was indulged in. Not sufficient, however, save in few instances, to demonstrate their value, nor cause any action tending to a practical application of the suggestions offered

because the time necessary could not be taken, and that condition unfortunately still obtains.

But few of the papers written have ever been brought up for discussion at a subsequent meeting, and many of them lie buried in the Proceedings and come to light only at such times as some of the more studious members make individual use of the valuable suggestions found preserved in these volumes.

The loss papers form but a small portion of the great number of contributions read before this association. There are more than fifty papers on Hazards and Inspections, at least a dozen on the one subject of Electricity alone, and numberless others on every phase of our business.

That a considerable number of the members entertain the thought that many of these papers are of unusual value and believe that some plan should be devised to bring a greater number of them into practical use is indicated by the recommendations of a number of the presidents and the efforts which have been made to have more of the loss papers published in pamphlet or book form. In 1901 the Committee on Publication of Loss Papers reported in part as follows: "The committee has selected from numerous papers on the subject such as seemed most suitable, and it is estimated that these will make a book of some two hundred pages. It is the intention of the committee to print and bind five hundred copies of the work at the start and to contract for an additional five hundred in loose sheets, to be bound as needed." I believe the reason that nothing further was done was on account of its being too expensive.

In 1904 the Executive Committee was empowered to have printed special papers within their judgment, but the small disturbance to insurance interests in 1906 probably changed the channel of their thought and prevented action.

It is to be regretted that the item of expense should prohibit the fulfillment of the committee's plans, and that these papers cannot be assembled and be made to do the work which their authors intended and for which they gave their time and experience.

The education of the Special Agent is not the least of the objects of this Association, but it appears to me that he is left largely to his own devices to acquire his education as best he may and that the Association is not giving him all the aid that it might in directing him along the lines of least resistance.

If he asks, which he often does, what he can study which will result in the greatest benefit to him for the time expended, we have nothing to offer him in the way of a plan. The best we can do is to tell him to get a Tiffany, or Mr. Moore's "In-

struction Book," an Ostrander, or some other insurance law book, and then get experience.

The first few years he is on the road he flounders about on a sea of uncertainty, faces strange, and, to him, "unexplored conditions, is impeded by unsurmountable obstacles, is turned this way and that by unforeseen obstructions, is bewildered by doubts as to the direction he should take, and is constantly arrested by unknown objects and dangers" which compel him to determine action based on immature judgment and unacquired experience, or to enter the field as an original investigator and do over and over again the same things that others have done long years before, because he is unprovided with anything that will guide him to a better way.

We have the Insurance Library and did have an Insurance Institute, and I hope that something will be done to revive it, as I am most heartily in accord with its objects. But as a large number of field men make their headquarters in places other than San Francisco, they are unable to take advantage of the library or the Institute lectures and instruction, and it would appear that in order to reach the inexperienced young man who is thus situated, something in the nature of helpful suggestions is needed, and I submit that few problems of greater importance face this Association than that of providing such assistance, and the publication of a volume of the loss papers would be of inestimable value, as would also a volume on Hazards and Inspections, compiled from the same source.

President Thornton, in his address before this Association in 1906, says in part: "It is of the greatest importance that insurance interests be placed in the hands of able, intelligent, educated men, thoroughly trained in all technical matters pertaining to the business. It is conceded that to be a successful underwriter one must be versed in the broad principles of hazards, lines, limits, contracts, rates, protection, etc., and be, as well, somewhat of a lawyer, a bookkeeper, a chemist, an architect, an electrician, a machinist, a mathematician, a diplomat, a financier. The doctors, the lawyers, the bankers, the miners, the electricians are fittingly trained and taught for their individual callings; the men of the professions and sciences profit by the researches, studies, writings and teachings of those who have gone before. The insurance men buy their experience and the companies pay for it, and few profit by the experience of others."

The Special Agent is still required to select, appoint and instruct Agents in the broad principles of insurance and underwriting, in rates, rules, lines, limits and the general policy of the company he represents, to get business and collect accounts. To inspect ordinary and special hazards. To report

on the resources, general, physical, moral and conflagration hazards of towns, and to make maps. To report on the water supply, fire department and other protective features and to adjust losses.

If he does these things as they should be done, the Special will find use for a working knowledge of all the subjects mentioned by Mr. Thornton, and if he is attempting to build his house of knowledge without a plan (and such a lack of system is discouraging to him and costly to the companies), the correction of this condition would appear to be a proper subject for the attention of this Association in its plans for the extension of institute work.

Some members of the profession appear to believe that as we have inspection and rating bureaus, map companies to make maps, independent adjusters to handle losses, and managers to do the underwriting, the Special Agent has little need to bother his head about such things—his work is to “get business” and increase the premium income.

The possession of knowledge, particularly this class of knowledge, certainly does not reduce one’s ability as a “business getter.” If it does, and the study of the subjects mentioned are of little or no value, then a large number of the members of this Association are wasting their time listening to papers on adjustments, hazards, inspections and protection, and problems in underwriting, and the effort to have a number of the loss papers published in book form, and the suggestion that the Special be assisted to a better way of gaining knowledge, are subjects unworthy of our attention.

If, however, this view of the subject is incorrect, and the need is a real one, there is ample opportunity for a committee to exercise its ingenuity in devising means for placing helpful suggestions under some plan or system in the hands of those who desire to be benefited by the experience of others and avoid misdirected and unnecessary reading, and I hope that it may appear desirable to take some action at this meeting toward the publication of the loss papers in book form and the appointment of a committee to further consider the needs of the inexperienced Special Agent. We should not overlook the fact that this man will be called upon to assist in maintaining the standard of this Association and that he requires all the knowledge that experience and ingenuity can devise for his benefit.

(Applause.)

The President: I hope that the recommendations Mr. Staniford has made in his paper will be promptly acted upon by the Association. Referring to the young special agent, we all know

how we felt when we went up against our first loss, and let me say this, that since I have quit adjusting losses and taken hold of the loss department of an office, I find that I have just as much need of the things that Mr. Staniford has called attention to, in fact, a great deal more than I ever had in the field.

Mr. Dornin: I have known for a long time that it was Mr. Staniford's ambition to have these valuable papers put in concrete shape and make them valuable for adjusters and others. I have listened with a great deal of interest to the reading of the paper and am glad that he has taken it in hand to advance these ideas in such a shape as has, I believe, induced the Association to go ahead with this matter. You will recollect that after a great many efforts the Association had the humorous papers and witty sayings of the Knapsack compiled. They are very valuable, and they furnish a lot of amusement for an idle half hour or something of that sort, but it does seem too bad that these valuable papers which have been written by some of the ablest and the brightest men that have been members of this Association, many of whom now have passed on to the silent majority, should lie buried here under the pages of some thirty or forty volumes of these proceedings. Very few of the Association members here, I warrant, have a complete file of those proceedings to which they could refer, and I think that our President put it very tersely when he said they were "avoided by both the studious and the curious." I think you struck the keynote exactly. At the time Mr. Staniford referred to, in 1901, it was my pleasure to be the President of this Association, and I think it was during that meeting that a committee was appointed to consider this very matter—the compiling of these lost papers into a volume which could be used to great advantage by all of us. Now, I am always ready to see a lot of work done, particularly when the other fellow does it, and for that reason I would like to see that very committee that was appointed at that time revived, and asked to continue and take up this labor—to carry out the suggestions made by Mr. Staniford. It seems to me, and it has been suggested, that Mr. Staniford, be added to that committee. I think that is a very good idea, and would ask that the President consider that, when he is making his appointment. Now, as to the cost of that production. It does not seem to

me to be an impossible thing for the committee to canvass the membership of this Association and secure enough subscriptions in advance to insure the first cost of that publication. It would be very easy for them to determine—they will know how many pages are necessary. They can then get a tentative bid for the first production of, we will say, two or three hundred. I would, therefore, offer as a suggestion that in appointing the committee, Mr. President, you refer it to the same committee, with the addition of Mr. Staniford.

The President: As I understand it, that committee never reported.

Mr. Dornin: I have never heard that it did.

The President: Do you know who constituted the committee?

Mr. Dornin: I don't know.

The Secretary: I think they are dead, I am sorry to say.

Mr. Staniford: I think that Mr. Lowden and Mr. Sexton, and I am not sure, but Mr. Kinne were members of the committee. I am not sure about Mr. Lowden and Mr. Sexton. However, I don't remember the others.

Mr. Kinne: This suggestion of compiling the papers is certainly a most valuable one, but it will be a great deal of work. I am not quite so sure as Mr. Dornin is that it would take but a little time to go over the papers. There are quite a number of written papers, and the committee appointed possibly might and ought to be considered on two points: first, there is the possibility that it might be better that no one who has written a paper should be a member of that committee. There is a certain amount of inspection, selection and rejection embodied in this idea of bringing into a small, at least smaller and more compact form the best things that have been written. These papers should not be published in full, whatever merit there may be in the whole matter, but certain paragraphs, so to speak. It might be necessary to publish some papers in full. This is a very important matter. As one that has written a few of the papers besides a President's address in the past, I would not like to be one of that committee, I am not speaking for the others whose names have been mentioned as possibly on that committee. I don't remember that I was, but it is an important matter, and I think that if the committee is appointed—and I think it is right that

there should be one—the President-elect should take time to consider and analyze the fact as to who should be on the committee. Some of the brighter and younger men, those who are going to take our places in the future, can certainly read over this vast amount of literature, and decide what will be best to be published for the information of us all.

Mr. Watt: I have listened to the paper just read with a great deal of interest, and am fully in accord with the idea that the best of these papers, I don't mean the best selection of all the papers, but the best selection from all of the papers should be culled out and published in book form, and it does not seem to me that the best and most experienced men of the Association should be disqualified from serving on that committee. However, I move as a substitute to Mr. Dornin's motion, that the Executive Committee be requested to select a committee of men well qualified to discriminate among all of these papers, among the material found in the various papers, with a view to publishing the best things that have been written by the members of the Association, and which are applicable at present, in book form. And before I sit down I want to say further, that I don't anticipate that we could secure enough ordinary subscribers to such a publication as to justify its publication. Therefore, I think private subscriptions would be necessary. As far as my office is concerned, we are willing to contribute \$50 or \$100 toward the expense of publishing such a volume in addition to taking our quota of the copies.

Mr. Dornin: I think Colonel Kinne misses the point that I made. I did not intend to belittle the labor that would be involved in compiling that volume. My idea was that a very brief review of the papers could be made and be sufficiently accurate to determine about how much space would be occupied, and get bids on that amount of printing. The labor attending the compiling of the book and the arrangement thereof would, of course, take a lot of time.

The President: Do you accept Mr. Watt's amendment?

Mr. Dornin: I am perfectly willing.

Mr. Sexton: In the matter of selection and culling out it would be a good idea to submit the paper to the author. He might, having grown older since he wrote it, find a great deal that

he could drop out. (Laughter.) Of course, I understand very well why Mr. Dornin added Mr. Staniford to that committee, because it was intended that Mr. Staniford should do all the work. It should be provided that the authors of the papers should have the privilege of having them submitted to them, so that they could cut out portions that they would not want to have published.

Mr. Fuller: I am in hearty accord with Mr. Watt's suggestion to leave this whole matter to the Executive Committee. I second his motion on that proposition.

The President: Mr. Watt, would your motion include the suggestion that this committee should proceed with the work, or that they were to report here next year?

Mr. Watt: No, sir, proceed to act. We don't want to wait another year.

The President: Provided they are sure of their finances.

Mr. Kinne: I think there need be no trouble at all about the finances as far as the different companies are concerned. I am sure that every company would be glad to do something without taking a dollar from the funds of the Association. I am heartily in accord with Mr. Watt's motion because that relieves the President from any embarrassment, and puts it in the hands of the Executive Committee, and they certainly will be able to do the rest. I think that is the proper thing.

The President: Mr. Dornin accepts Mr. Watt's motion which is that this matter should be left to the Executive Committee.

The motion unanimously prevailed.

Mr. Folger: The first speaker during this discussion did not say, what I am sure he thought, that Mr. Staniford had given evidence in his paper of having done a very large amount of work. Only those who have read through the proceedings of this Association can realize the time it takes to write such a paper. Mr. Staniford pointed out not only that we want information about adjustments and losses, but that a properly trained special agent needs much other information. As to the number of sets of our proceedings now in existence, there were only eleven complete sets before the fire, and I suppose there are not over seven now. I rose to speak of a point brought out in the President's address of last year, when it was recommended that some

action be taken looking to the publication, in this country, of something like the reports of the Federation of Insurance Institutes of Great Britain and Ireland. After an existence of over twenty years, the institutes on the other side of the water found that each year they had many valuable papers printed in their proceedings which very few of their members had studied. As the average member of one institute could not hope to read the proceedings of the others, they devised the plan of issuing selected papers in book form once a year, under the auspices of the Federation of Insurance Institutes. Before the San Francisco conflagration, this Association suggested that something similar should be tried in the United States, but the fire prevented any practical results. A similar recommendation was made last year in the report on the President's address, which was buried with so many other good things. A day or two ago I had an opportunity to look over Mr. Staniford's paper, and it has occurred to me to offer the following resolution for your adoption:

Resolved, That a committee of three be appointed to correspond with the Fire Underwriters of the Northwest, and the Insurance societies of New York, Pennsylvania and Hartford, and others of like character, with the view of bringing about some co-operation for the publication of papers of common interest, upon the plan followed by the Federation of Insurance Institutes of Great Britain and Ireland; that the committee be instructed to urge the preparation of an annual volume containing one paper furnished by each society and additional papers of merit and interest, receiving the unanimous approval of the co-operating societies; and that if a plan can be formulated and adopted during the current year, the committee be empowered to pledge the co-operation of this Association, and with the approval of the Executive Committee, to agree to the payment of our share of the cost of publication.

The President: You have heard the resolution.

The Secretary: I second it.

The resolution is unanimously adopted.

The President: I will appoint Mr. Folger, Mr. Kellam and Mr. Staniford on that committee. I take much pleasure now in introducing to you the gentleman who has been President of the Board of Underwriters for the last twenty-one years. He

will read his paper on the "Value of the Board of Fire Underwriters,"—Mr. Charles D. Haven.

VALUE OF THE BOARD OF FIRE UNDERWRITERS.

By Charles D. Haven.

The constitution of the Board of Fire Underwriters of the Pacific states that "The functions of the Board shall be the equitable adjustment of rates to hazards based on the experience of its members; the encouragement of improved methods of construction in buildings as a means of decreasing the fire waste; the reduction of expense in transacting the business of its members through co-operation in the survey and inspection of risks, and in such other methods as will lessen the cost of fire insurance and secure a reasonable profit to its members."

This succinct statement so nearly expresses the full value of the Board when its functions are in operation, and the great advantages to be obtained from it, not only by the Fire Underwriters, but also the public, that this paper might be ended right here, without any further amplification of the subject.

The enjoyment of these advantages for many years may have tended to lessen in some measure our appreciation of their values. Sometimes there appears to be an inclination to forget the paramount importance of preserving our great organization unimpaired. Our older underwriters are fully convinced of these facts and therefore do not need to be reminded of them.

In this paper I shall endeavor to impress upon the younger members of our Board, and the Special Agents, the importance of always loyally supporting the Board, in order that its maintenance shall be assured.

It may be said that a well-trained underwriter of experience should be able to conduct business properly for the Company he represents without the assistance of a Board; but he will be very greatly handicapped in doing much that is necessary for his success, on account of the heavy expense that would be incurred, which can only be lessened by the united action of Companies in a Board.

It will be said that non-board companies are doing a profitable business, some of them a large and profitable business. The answer to such a statement is that they would utterly fail to make a good profit without the existence of a Board to formulate and enforce rates. For evidence of this fact, you have only to look back to the times when rates have been suspended, and note that the result of such action was great demoralization in the business, compelling many Board and non-board companies to retire from the field altogether

until a prosperous condition of insurance affairs was restored.

It can be truly said that non-board companies are willing to prosper at the expense of Board Companies, a position which is neither commendable nor just on their part. The advantages to be obtained by Boards are so great that no company, either large or small, can afford not to be represented therein.

"Lest we forget" let us call to mind some of the details of our great organization, which exercises jurisdiction over an area greater in extent than that of some of the countries of the world. In addition to the head office in San Francisco, there are general offices, as you know, in four other principal cities. In the service of the Board there are:

Two General Secretaries,
Six District Secretaries,
One Consulting Electrical Engineer,
Seven Electrical Engineers,
Seven Engineers supervising sprinkler equipments,
Thirty Rating Surveyors,
Thirty Daily Report Examiners,
Twenty-five Accountants, stenographers, and general clerks.
These paid servants of the Board number 108 in all.

In addition there are five standing committees, six sub-committees and four special committees, making fifteen committees in all, with a combined membership of 78 principal representatives. Here is a large body of able and earnest-minded men who are constantly giving to the members of the Board their intelligent service in the common interest. The value of this service can hardly be over-estimated, and could not be had unless the Board should be maintained in its full integrity.

Are we not justified in calling the Board our "great organization?" It is my unqualified opinion that its maintenance for the proper formulation and promulgation of adequate rates and the preparation of rules and regulations is absolutely necessary for the successful and profitable prosecution of the business; and that it should at all times receive the loyal and hearty support of all principal representatives, special agents and local agents, not only in their own interest, but in that of the companies they represent, as well as in that of the general public; for the reason that reliable indemnity in case of loss depends upon adequate rates and adequate rates are absolutely dependent upon board organization.

Some local agents are inclined to look unfavorably upon the restrictions placed upon them by Board rates, rules and regulations, therefore you cannot render a more valuable service to those whom you represent than by convincing a local agent of the **great importance** of giving loyal support to the Board. If we could attend the sessions of the numerous committees of

the Board, we would be surprised at the painstaking and intelligent work which is constantly being done to promote the best interests of the companies, the agents and the public. Whenever an agent assails the Board on account of some fancied grievance, we should endeavor to convince him of his incorrect judgment and assure him that the Board is endeavoring to serve him, his companies and the public in work which he would thoroughly appreciate if he could only look into it more deeply. Many a rating, rule or course of action would then become clear.

I do not mean to say that the Board may not make some mistakes, but they are few in number and are promptly corrected when discovered. All should be slow to censure the Board, and should seek full information before condemning its action.

I believe that upon due reflection, you will all coincide with the views herein expressed, and acknowledge the correctness of the conclusions arrived at upon the very important subject of the value of the Board of Fire Underwriters to the companies and agents and the public.

The invaluable machinery which we have constructed at so great an outlay of labor and expense should never be allowed to fall to the ground. (Applause.)

The President: For reasons that may be appreciated, the Chair does not feel called upon to criticise Mr. Haven's paper except where he refers to the local agents as being the only ones that buck the Board. We find sometimes that State legislators and insurance commissioners buck the Board. We have an insurance commissioner here today, and I would like him to explain why he bucks the Board as he does. It is scarcely necessary for me to introduce the Hon. J. H. Schively, Insurance Commissioner of the State of Washington.

Mr. Schively: Mr. President and Gentlemen: I have been attending the annual sessions of this Association for the past eight years. There never was a time in these eight years when I felt that I had more to say than I have at this present moment, and never a time when I felt so handicapped in the saying, because of the other proceedings that are to follow. I wanted to make two or three personal remarks and they all come back to the subject that Mr. Haven has so admirably treated in his address. In doing so, however, I wish to take up some of the papers read, beginning with that of the President. There was one feature of that paper which struck me between the joints of the

harness. He referred to the 15 per cent commission received by local agents. There were two agency offices in the city of Seattle very much opposed to my being elected as Insurance Commissioner. Now, it seemed to me that these two firms especially ought to have been friendly to me, and so I instituted an investigation. I said to a friend of mine, "You are very friendly with such and such people, go and find out why they are opposing me," and the report came back to this effect: "The fact is," gentlemen, said the local agent, "Schively stands in with all of these managers and special agents and keeps our commissions down. Now, if he were not so friendly down there in San Francisco, he would make these companies pay us 25 per cent commission instead of 15 per cent." I said to my friend, "Let that firm continue to oppose me. I can give them no relief whatever." The other firm had practically the same objection. The simple fact is that I have been asked in all of the eight years but one favor from the managers or specials with headquarters in San Francisco, and I think I referred to this a year ago. That favor was when the disaster came in 1906, a number of the companies losing all of their papers, lost among the others their authorized list of agents, and they wrote to my department for relief, and asked that I furnish the names of the agents in the State of Washington. So far as I now remember that was the only favor ever asked by the people here in San Francisco of my department, except exact and equal justice. (Applause.)

Now the most of you know that I have been passing through the fires of criticism lately, and it was suggested, not the criticism but the cause of it, in one of the papers read this morning, and that is with respect to the rating bureau. I imagine that probably as much criticism has come to me about this as along any other line, but not from the suffering public. The fact is that the only scientific, consistent, persistent effort made in the State of Washington looking to scientific construction of buildings is the emanation of the rate making bureau in the State of Washington. It is the protection of our State along that line. The second is to keep down the fixed charges to the public. Consequently, then, the State of Washington enjoys a lower average rate fixed by this rate-making bureau, according to the statement of the President of the National Board of Fire Underwrit-

ers than any other Pacific Coast State, and that without material loss of profit to the companies.

Now, gentlemen, this question of the value of the Board of Fire Underwriters suggests itself to my mind in this way: Is this Board of Fire Underwriters subjective? If so, then I have nothing whatever to say. If it is subjective and objective, then I have this to say: It is not accomplishing what it ought to accomplish, and it is not for me to state the remedy. Now subjectively you are doing well. As Mr. Haven well said, the protection of the non-board company is the organization of the Board. That is perfectly clear to my mind. I have persistently refused in the State of Washington to know the difference between board and non-board companies, so far as their names were concerned, in order that, if any question should come before my department with respect to a company, I would not know it as a board or a non-board company, and I say to you most honestly that where I know the names of the non-board companies, those names have been forced upon me by the special agents of the non-board companies themselves. Nevertheless, I realize this, that the protection of any industry depends upon the loyalty of that industry to itself as well as to the people with whom or with which it operates. Now subjectively you do a good deal for yourselves, not probably as much as you ought to, and yet you know of that better than I do. But objectively you are not accomplishing what ought to be accomplished from some source, and I do not know the source, unless it be a Board of Fire Underwriters. Now let me be specific as to the State of Washington. In the first place, I don't know whether it comes as a surprise to you gentlemen or not, but it is an actual fact that there is a law on the statute-books of the State of Washington admitting unauthorized companies and allowing them to do just exactly what they want to do. A law created, written upon the statute books for that very purpose. Now, who is going to instruct the legislator? Who is going to inform the people or the public as to the fact that the ultimate result of that must be loss to the public? The insurance commissioner may point it out, has pointed it out to successive legislatures, and has received no encouragement from the very source from which he should receive encouragement, an organization of this character. Why does an organization of this

sort stand back,—out of pure sensitiveness? I think, if I may confine this to the State of Washington—and I do this only because I know the State of Washington better than I do the other States—I think, gentlemen, that in the progress of the human race the day of the controlled legislature by the individual boodler has passed. Yet a good many men who ought to be intelligently present at the session of a State legislature are absent for fear they would be charged with lobbying. Now, I have no word to say—looking into the faces of men who are conducting stock companies—I have no word to say against mutual companies as such. If honestly and legitimately conducted on the basis of mutuality, then I have nothing to say as a State official. The State official is supposed to be just as loyal to that sort of institution, if it is operating within the law, as any other institution: but are you aware of the fact that in the State of Washington the laws controlling the mutual companies allow the mutual company to write on a stock company basis without the necessity of a cent's worth of assets? They are allowed to relieve their membership of liability by accepting a cash premium. When the report of this company, or these companies, come to my office. I ask the question, Are you conducting your business on the assessment plan, or the level premium plan, and the most of them answer on the level premium plan. Now there is no protection to the public in that sort of thing. I called the attention of the legislature to this two years ago, four years ago, and am doing it again this year, but what session of the legislature pays any attention to the recommendation of a state official, unless it is backed up from somewhere, unless there is somebody behind it to show a little interest in the matter, and I suggest to you, gentlemen, that the protection of the public from that side is just as much of a duty on the part of the Board of Fire Underwriters as any other suggestion or subject that may call you together. Now I could go on and criticize these laws all the way through. The state is young. These laws were made when the state was younger. It seems to me that the extension of the idea of the Board of Fire Underwriters ought to be made along these lines.

Now, another thing. A majority of the papers read before your Honorable body are of vastly more use and value to the general public, to the ordinary insurer, than they are to the ma-

majority of the people who attend the Association meetings, because the majority of people who attend the Association meetings have as much technical knowledge along the lines of the papers as the gentlemen who read them, with all deference to those who are editors for the time being. Take the paper that was read yesterday by Mr. Sexton. There was not a gentleman present who did not know as much along that line, judging from what was said, as the author of the article himself. And yet the information therein contained was very valuable, and while 95 per cent of those present knew those facts, 95 per cent of the public knows nothing of them whatever. Now in this meeting—and I am going to draw to a close now, because I do not want to go too far in this matter—here is the thought I have come out of the fire of criticism with. First of all, indignation. I said to myself, it is a common saying that where there is so much smoke there is some little fire, but it is altogether a lie, because of all this smoke of criticism there is no actual fire back of it. Then I thought to myself, there may be some germ of truth in this, and my duty as a man is this: To look carefully into these things, these charges that are made against me as a State official to see if there is anything about this that I have been doing, or if I have been tending along these lines, and so the outcome of it to my own personal mind is this: to exercise greater care to be a better and more efficient State official in the interest of all interests committed to that department. Now, do I stand alone in responsibility? How about the newspaper that does the criticising? Might there not be some fact about the entire thing that would make the editor say to himself, if there is an evil here, let me oppose it, and let me show the public the remedy for it. Then as a local or special agent, what is your duty to the public? Certainly, gentlemen, you and I cannot shoulder the whole responsibility. Certainly you and I seeing errors cannot remedy the entire fabric of things. But there is one thing that you and I can do, and I have said what I have said to lead up to this point: The value of the Board of Fire Underwriters to yourselves individually, subjectively, and to the public objectively will be intrinsically just exactly what you individually make it. That much and no more. Every time a local or a special agent, or any man with information along a line of value to the people

goes forth to the telling of a lie, to the performance of an act which is an untruth, to that extent, to the extent of his personality and influence, he has undermined the value of the Board of Fire Underwriters. And conversely, every time he goes forth to tell the truth, honestly, squarely and manfully, every time he goes forth to an honorable, straightforward transaction, he is building up the value of the Board of Fire Underwriters of the Pacific Coast, and adding to the value of humanity wherever he may be. Gentlemen, I thank you for your attention. (Applause.)

The President: We are very glad, indeed, to hear from Mr. Schively, and glad to have him here. With all his faults we love him still. The last paper—and it is a very important and excellent one—is by Mr. R. T. Archer, adjuster, of Los Angeles. He wired me that he was sorry he could not be present with us, and I have asked Mr. Leslie Bates to read the paper.

THE DOCTRINE OF WAIVER AS RELATES TO THE ADJUSTMENT OF FIRE INSURANCE CLAIMS.

By R. T. Archer, Attorney and Fire Insurance Adjuster,
Los Angeles, California.

It has been wisely said by one of the sages of the profession that the first duty in the settlement of a loss is "to adjust the insured." Granting the wisdom of this maxim, I would say that in these days of hostility to corporations the first duty of an adjuster is to secure a non-waiver stipulation. It is related of a certain Eastern adjuster that he will not even say "Good Morning" to his wife without first having taken a non-waiver. This facetious illustration of course represents the extreme view of the doctrine, but, speaking seriously, an adjuster cannot be too cautious in safeguarding the rights of the Company in the very beginning of the adjustment.

Doubtless every adjuster can recall some instance, perhaps many of them, where he could have saved his Companies thousands of dollars had he resorted to the very simple expedient of securing a non-waiver stipulation at the outset, thereby protecting the Companies' rights, and sparing the loss fund the humiliation of being drawn upon for the payment of a claim under a void policy.

Many able treatises have been written upon the subject of waiver and estoppel, and the Insurance Law Digests are full of eloquent testimony of the dire results of waiver of the Companies' rights in thousands of settlements, and, it would seem unnecessary to sound any note of warning at this late day, but con-

stant reiteration seems necessary to secure results in any cause, and Insurance Procedure is perhaps no exception to the rule.

I am aware that many will differ with me upon the importance of this subject, but even a casual perusal of the decisions will convince the most skeptical that it is indeed very vital. It is a well-known fact that in the contest of insurance cases in the Courts, juries are inclined to favor the claimant as against the Companies, owing, perhaps, to the prejudice of the average jury against a corporation, which is aided in many cases by the ability of the claimant's attorney to play upon the feelings and sympathies of the jurors. Knowing these facts, the Companies expect to be worsted in jury trials in the lower Courts, but it must be borne in mind that cases involving waiver are frequently appealed to the higher courts, and the Company's chances of winning upon appeal are largely dependent upon the manner in which the claim was handled by the adjuster in the beginning. Examine the pleadings in nearly any fire insurance case, and it will be seen that waiver and estoppel form the basis of the majority of complaints filed, and attorneys for claimants, knowing the latitude and elasticity of the law upon this subject, seize upon every opportunity to plead these remedies for their clients. Waiver in fire insurance cases corresponds to the much overworked defense of contributory negligence in personal injury cases, and were it not for the serious financial consequences to the Companies it would be most amusing and laughable to analyze some of the specious and flimsy pleas upon which waiver is predicated.

It is of course elementary that a fire insurance policy is a contract containing reasonable conditions with which both insurer and insured must comply, although some loss claimants seem to think that a policy is a promissory note payable on demand, with a sight draft attached. It is difficult for the average claimant to understand why a policy should contain so many conditions and restrictions. He sometimes thinks that these are cunningly devised and placed there by the Company for the sole and deliberate purpose of complicating the contract and involving his claim in technicalities from which there is no escape. He does not realize, and it is most difficult to make him see, the fact that these very conditions which he thinks are irksome and superfluous are indeed necessary for the Company's protection and, in fact, for its very existence. To add to his discomfort, his mind is usually further poisoned by meddling neighbors, who, after a loss, seek to offer him various kinds of advice, mostly to the effect that all insurance companies are robbers, and to be prepared to "stand and deliver." It is the overcoming of this condition of the claimant's mind that calls for

the use of the greatest diplomacy on the part of the adjuster, for he is frequently compelled to listen to a severe arraignment of Insurance Companies in general, and his Company in particular, but if the adjuster is wise, he will suffer in silence and await his turn, for be it remembered that when you lose your temper in a controversy of any kind you are at the mercy of your adversary. It should also be borne in mind that, while losses are a common-place and every-day occurrence with an adjuster, in the case of a claimant a fire is an unusual event, and, being solicitous of his rights, he is full of apprehension, and is naturally in a nervous state of mind and prepared for a clash when the adjuster arrives on the scene of the loss. At this juncture, it is wise for the adjuster to hark back to his Sunday-School days, and recall the Bible quotation: "He that ruleth his spirit is greater than he that taketh a city," and by a judicious admixture of courtesy and firmness and patient argument he can so free the claimant's mind from prejudice that he will at once become reasonable and fair. Then is the time to secure your non-waiver stipulation if desired, and particularly is it important to secure this before any of the details of the loss are discussed, or the claimant is put to any kind of trouble or expense.

It is contended by some adjusters that non-waiver stipulations are not necessary or desirable, only in certain cases, but this is not a safe assumption, as it is impossible to foresee possible contingencies in the beginning of an adjustment, and forfeitures frequently develop only after the most searching investigation. Consequently, it would seem desirable to secure a non-waiver at the beginning of every case; at least it can do no harm, even though it is never used. It seems like a travesty that it should ever be necessary to take such a stipulation in any case, as it would appear that the policy conditions are clear enough upon the point of waiver when it states that "no officer, agent or other representative of this Company shall have power to waive any provision or condition of this policy except by written agreement." But the Courts have held this provision of the policy to be inoperative after a fire has occurred. Consequently, these decisions seem to create a condition, rather than a theory, that makes it necessary to forearm ourselves by throwing up additional breastworks in the form of a non-waiver agreement outside the main fortifications of the policy before the battle begins, if we wish to be secure in our position.

There are many forms of non-waiver stipulations in use, and, while a single standard form would perhaps be convenient and desirable, yet the law holds that the exact verbiage of an agreement of any nature is not so important providing the intent of the parties is clearly expressed, or can be sufficiently ascertained therefrom. There is one clause, however, in nearly all non-waiver

forms, which I consider faulty and undesirable from the Company's standpoint, and should be omitted from all forms that seek to protect the Company's interests, and that is the clause which refers to the interruption of the insured's business. I have always considered this clause dangerous from a legal standpoint, and my judgment has been recently sustained by a decision against the Companies in a suit involving this very point. There is sufficient mutuality in a non-waiver agreement without including this objectionable clause. The words "in order that the insured may not be delayed in his business" sound innocently enough, but it sometimes happens that adjustments are delayed through the negligence of the Companies or their representatives, and if the settlement is being conducted under a non-waiver that contains such a clause the claimant might have a good action for damages against the Company on account of unreasonable or unnecessary delay.

Another valuable and useful implement in the adjuster's kit is the adjuster's agreement. When settlements are conducted under a non-waiver stipulation or otherwise it is highly important that a signed memorandum be secured from the claimant immediately that the amount of damage is agreed upon under each item, no matter whether proofs are to be taken at once or later. The best memories are faulty when compared with paper and ink, and it is difficult for a claimant to deny figures over his own signature, and a memorandum agreement of loss figures often saves embarrassment for the adjuster and law suits for the Company. Every adjuster's agreement taken under a non-waiver stipulation should specify the non-waiver, and also that the taking of the agreement has no bearing upon the Company's liability under the conditions of the policy.

Too much emphasis cannot be placed upon the importance of gaining the confidence of the claimant in the very beginning of the adjustment. Be frank with the insured. Don't try to deceive or mislead him in any way regarding your intentions. After values have been determined if any forfeitures or complications are discovered, take an adjuster's agreement, and tell him plainly that the claim will have to be referred to the Company before you can either admit or deny liability, and if he is honest, he will admire you for dealing so openly with him, and if he is dishonest, your fairness will instill in him a wholesome fear and respect, as fraud always shuns a fight in the open. The Golden Rule can just as safely be applied to loss adjustments as to any other vocation. You despise a claimant who tries to deceive you, and there is no more excuse for sharp practice and deceit on the part of the adjuster than the claimant, and no reputable Company wants the benefit of salvage thus obtained. Our illus-

trious President's policy,—“The Square Deal”—should be the guiding star in all settlements, both for the representative of the Company and the claimant, but the “Big Stick” should be used sparingly, as that is a weapon of attack, and the adjuster's position is mostly one of defense. There are no outlays that pay such a big return upon the investment as kindness and courtesy. These, added to firmness and integrity are the adjuster's best weapons, and the use of the “Big Stick” and the “Steam Roller” should be delegated to the manager and home office officials, all of whom, being at a safe distance from the scene of trouble, can apply them strenuously and fearlessly without much damage to themselves or the claimant. But the adjuster, being on the firing line, must look well to the safety of his own hide and that of the Company.

The agent is also a very important personage to get in touch with in the early stages of the adjustment. I do not mean by this that the adjuster should allow the agent to in any way usurp his duties and prerogatives or to influence his mind in any manner, but he needs to be cultivated as a source of information, as it frequently happens that an adjuster spends much valuable time in working up a case of supposed “no liability” only to find out in the end that his house of cards has tumbled about his head by some act of waiver on the part of the agent that does not appear on the policy or the Daily Report, whereas a few moments' intelligent interrogation of the agent would have spared the adjuster much time and trouble. For instance, in the matters of leased ground, chattel mortgages, ownership, and various other causes of forfeiture, it frequently occurs that the agent had knowledge of these when the policy was written, or before the fire occurred, and, owing to oversight, or clerical error, this does not appear upon the policy or the Company's records, and the law that “knowledge of the agent is knowledge of the principal” is as old as the hills, and almost as unyielding when the Company endeavors to resist a claim under such conditions. Some adjusters make the mistake of ignoring the agent entirely. This is very bad practice, as he is quite an important party to the contract, and by his peculiar relation as an intermediate between the Company and the insured, he naturally possesses information valuable for the adjuster to know. In this connection, it is well for the adjuster to cultivate and keep on good terms, not only with the agent, but with everyone who can be of use to him. Omar Khayyam, in one of his books, has written this truthful verse:

“He that hath a thousand friends, hath not a friend to spare;
He that hath one enemy, will meet him everywhere.”

Likewise the adjuster.

Many awkward mistakes grow out of the adjuster's negligence

in not carefully examining claimants' policies at the beginning of the adjustment, and while this is an important duty, yet he must not run away with the idea that the policy is the sole guide and court of last resort. Any well-informed loss manager or insurance attorney can disabuse his mind of that hallucination in a very short time. In every valid contract there must be a meeting of the minds of the parties before it is legal or operative, and the policy is only the written evidence of the original oral or mental contract. Consequently, oral evidence may be introduced to explain or vary its terms, or even to reform it entirely. Here, again, is where waiver, construed from acts or knowledge of the recording agent may be an important factor in determining liability. Therefore, the extreme importance of securing the agent's knowledge as early in the adjustment as possible.

One of the most important and complicated subjects with which the adjuster has to deal is that of appraisal, and it fairly bristles with the danger points of waiver. Policy conditions relating to this are so simple and explicit that it would appear to be almost impossible to misinterpret them, or to take a wrong step. Nevertheless, Courts and juries seem to find enough weak points in the Companies' armor to inflict considerable punishment; therefore the importance of knowing the dangerous places in the road in order to avert disaster.

A most superficial glance at the policy tells us that the first requisite of appraisal is a disagreement as to the amount of loss between the insured and the Company. It is highly important to the validity of the award that the disagreement should be bona fide,—that is, both the insured and the adjuster should have first made an honest and concerted endeavor to arrive at the amount of damage before an appraisal is demanded by either. Sometimes an adjuster thinks he wants an appraisal before even going into the loss in detail, and suggests to the claimant that they "agree to disagree," so that an appraisal can be had immediately. This is a dangerous practice, and the award based on such an appraisal can be easily set aside in the Courts on the ground of non-compliance with policy conditions, and in addition to this, the Company would probably be held to have waived all rights on account of its adjuster having suggested such an irregular proceeding. After a bona fide disagreement a proper demand should be made for appraisal, and, to prevent future misunderstandings, the demand should be made in writing and sent by registered mail to the insured and also to the mortgagee, if any, and if there is more than one Company interested, a separate demand should be sent for each Company, as the Courts have held that a joint demand is not legal. After proper demand has been made, it is desirable to

secure a submission agreement, if possible, although the Company cannot insist upon this as a matter of right, as there is nothing in the policy conditions that requires it. If the insured refuses to sign such an agreement, the adjuster should then send him a registered letter, stating that a disagreement has taken place, and a demand made, and name the Company's appraiser, and state that the Company is prepared to proceed with the appraisal as soon as insured has named his appraiser. If a submission agreement is secured, it should only call for the determination of the amount of the loss, as it is not legal to submit questions touching on the validity of the policy, as the Courts will not permit themselves to be thus deprived of jurisdiction in matters that relate to the life of the policy. Neither should the submission agreement contain any reference to the amount of insurance nor any limitation clauses, such as co-insurance, etc., but should contain a full and intelligent description of the property submitted to appraisal, as that is what the appraisers are most interested in. The policy distinctly states that an appraiser must be both competent and disinterested, and, if they fail to possess these qualifications, their award may be set aside, providing the deficiency or objection is properly made in writing as soon as same is known. Otherwise, defense is waived. We all know that the umpire is the most important personage in an appraisal proceeding, and, as "a chain is only as strong as its weakest link," great care should be exercised in the selection of the umpire. The generally accepted theory of the law is that the umpire must have substantially the same qualifications as the appraisers, and must act fairly and impartially in all differences submitted to him. As a rule, it is a difficult matter to have an appraisal award set aside except for fraud, but a few important exceptions might here be stated as taken from Court decisions. It has been held that the terms and conditions of the policy must be substantially complied with, or the award will be invalid. If the appraisers should refuse to hear evidence upon a question, where evidence is necessary to the proper determination of the amount of the loss, the award will be set aside. An award will be set aside which is grossly inadequate or which is grossly excessive, but it must be so much so as to "shock the conscience of the Court." Where the appraisers hear only one side and refuse to hear the other the award made upon such a hearing is invalid. If it can be shown that one or more appraisers was not disinterested or competent, and that this fact was not made known to the party affected at the time, this would constitute a good ground for setting aside the award. Where there has been any material mistake made, the award will be set aside, unless the party in whose favor the mistake has been made will consent to its correction, but honest

mistakes on the part of the appraisers and errors of judgment, unless of the most material character, are not grounds for setting aside the award. In connection with the subject of appraisal, it may be also instructive to cite some of the principal points of waiver, which it is well for the adjuster to keep ever in mind. Do not forget that denial of liability waives the right to appraise the amount of loss. A demand for an appraisal after knowledge of a breach of contract will waive all defenses. The weight of authority is to the effect that proofs of loss are waived by appraisal agreement except where the policy requires award to be made a part of the proofs. A failure to demand an appraisal within sixty days after the proofs of the loss have been served upon the Company also constitutes a waiver of right to an appraisal. Where the insured makes a demand for an appraisal and the Company refuses, this will constitute a waiver of the appraisal clause. Where there is no disagreement as to the amount of the loss the appraisal is waived. The right reserved to the Company by the conditions of the policy to rebuild, repair or replace property destroyed, or damaged, is waived by an appraisal, and an election to rebuild, repair, or replace waives the right to an appraisal.

The handling of fraudulent claims is one of the serious duties with which an adjuster is frequently confronted, and, like a plague that covers the entire land, the doctrine of waiver also touches this class of cases. Problems involving suspected fraud or incendiarism are the most difficult and complicated ones an adjuster is called upon to work out, and require the exercise of rare skill, judgment and diplomacy if he wishes to avert bad legal entanglements for his Company. Sometimes the circumstantial evidence in such cases appears so convincing to the adjuster that he can almost see the gates of the penitentiary closing upon the guilty party, and in his zeal to bring the matter to an issue he will say and do things that will not only defeat his purpose but also involve his Company in suits for slander and damages, and, should there happen to be any other defenses or forfeitures by which the Company might escape liability, these will have been waived by the adjuster's mistake in only following the criminal feature of the case. Every law-abiding citizen should wish to see crime detected and punished, and it is especially important to underwriters that firebugs be apprehended whenever possible. Any police official, however, will tell you that arson is the most difficult crime in the calendar to prove. It therefore behooves the adjuster to look well to his gun and ammunition before pulling the trigger in hunting game of this nature, for fear that the recoil at the breach will do more harm to himself and the Company than the defective charge does to his intended victim. It is one thing to suspect and accuse a person of a certain act, and quite another to prove these accusa-

tions to the satisfaction of the Court. In all suspicious cases where strong or absolute proof cannot at first be secured it is well to play for time, and endeavor to dig up some forfeiture or technicality upon which to escape liability, and if this cannot be found, it sometimes happens that the lapse of time will reveal the fraud itself. A searching examination under oath is usually very effective in such cases, as very few criminals can withstand close questioning without revealing some clew to their crime, which, if intelligently followed up, frequently leads to a detection of the offense suspected. In any event, such an examination can in no way prejudice the Company's rights, and even though it does not result in complete detection, it frequently frightens a crooked claimant into a compromise or the surrender of his policy for a nominal consideration. In all suspicious cases, it is well to delay and let the claimant file proofs of his own accord, and then you have his statement under oath to use against him if he has sworn falsely, and, should he fail to submit proofs within the required limit of sixty days, this in itself will constitute a good defense. Should detective services become necessary or desirable in the investigation of fraudulent claims of any nature it is usually most effective and economical to employ some reliable Secret-Service Agency than for the adjuster to attempt to do this work himself, as the adjuster is handicapped by being personally known to the claimant and his friends, all of whom would naturally be wary of his presence and questions. It is plainly the duty of the adjuster and insurance company to ferret out fraudulent claims whenever possible. The exposure and conviction of incendiaries has a good moral effect, and such conviction not only benefits the Company, but also the community in general. In this work, however, it is important that zeal be tempered with prudence and good judgment, and do not waste time and money in following useless clews founded upon mere suspicion or irresponsible rumors. In this connection, it is well to go slow in causing a claimant's arrest or accusing him of arson unless absolutely sure of your ground, as such procedure is very likely to result in disastrous consequences both for the adjuster and Company.

The doctrine of waiver also applies very strongly to the matter of proofs of loss. Some adjusters consider that it is safe to prepare and take proofs if a non-waiver stipulation has first been secured, no matter whether forfeitures are known or not. I cannot entirely agree with this. A much safer plan is to take an adjuster's agreement at the conclusion of the settlement and defer the taking of final proofs until such time as the Company is prepared to admit full liability. It is also important that proofs filed by the claimant should be properly handled to avoid waiver.

For instance, the Courts have held that retaining proofs of loss in silence will waive all defects as to form, but not defenses

that go to the validity of the policy. Likewise, demanding proofs of loss, or criticising proofs that may have been filed within the sixty day limit after knowledge of the breach of contract will waive all defenses. A claimant may be requested to furnish information on any point bearing upon the validity of the contract without danger of waiver, but a request for any kind of information upon the nature or amount of loss, which, of course, he cannot furnish without trouble and expense, will waive any and all of the defenses under the policy. Where proofs are returned or objected to on account of defects in form, each and every defect should be objected to specifically in writing, and by registered letter, and within a reasonable time. All the objections should be stated in the same letter, as the Courts will not permit claimants to be subjected to the delay of stating only one objection at a time, and all defenses not objected to at the first writing will be waived. When it is desired to resist a claim on the ground of fraud or forfeiture, and proofs have been filed by claimant within the sixty day limit, it is desirable that the original proofs be kept in the possession of the Company if possible, but if claimant should insist upon the return of the original proofs after objection to same has been made, then have a copy of the papers certified to by some magistrate before returning the originals.

It is perhaps needless to say that proofs received after expiration of the sixty day limit should be at once returned to the claimant by registered mail after having first made a verified copy. As every well-informed adjuster knows, there are many things that can be construed as a waiver of the policy condition requiring the filing of proofs of loss by the insured, such, for instance, as a denial of liability outright, also a promise on the part of the adjuster to prepare and forward proofs himself, and, in fact, hundreds of other acts too numerous to mention.

It will be seen from the foregoing that the Doctrine of Waiver is full of "Don'ts," and to follow all of its warnings might appear to clog the wheels of action in the settlement of claims. A prominent modern writer has said that "people who never make mistakes never make anything," which is equivalent to saying that we must take chances if we wish to accomplish much, but the business of dispensing Insurance Companies' assets is an important one, deserving of serious consideration, and an adjuster should not recklessly hazard his clients' money by running past the danger signals without heed, especially when it is perfectly easy to avoid bad consequences by a little intelligent thought and precaution. It has been nearly a hundred years since Davy Crockett uttered his famous words, "Be sure you're right, then go ahead," but this is sound advice even today.

The President: I would like to ask Mr. Granger, of Seattle, to say a few words regarding this subject and this paper.

Mr. Granger: Mr. Chairman and Gentlemen: I appreciate that the hour is getting late, and you are drawing rapidly toward the Knapsack. Therefore, I will be out of order in a very few minutes. I have been very much interested in all the papers that have been read, and particularly so in the one that we have just heard. It is largely a legal document. I don't know whether the man who wrote it is a lawyer or not. It bears the ear-marks of the profession. It is a very valuable contribution to the subject of the law of estoppel, or of waiver as applied to the insurance contract. The waiver proposition is the nightmare of the adjuster. It is always with him, and paraphrasing an old phrase, it is waive if he does it, and waive if he don't. I have one suggestion only to make in connection with this paper, which may be by way of an addenda. The adjuster should always bear in mind the lesson which the young lawyer learned from the old country justice in the State of Missouri. The young man had been reared and educated and admitted to the bar in the State of Vermont. Wanting younger and greener fields, he moved to the State of Missouri, opened his office and started in to the practice of his profession. He was long on nerve. He had but one book. It was an old code of the State of Vermont, and he brought it with him. It was the only volume which he had. He had his first case to try before this country justice. He took the volume with him, and when he reached the point of arguing the case to the judge, thinking that he would impress himself upon the mind of the court, he began reading some extracts from this volume. The justice of the peace shortly interrupted him, and said, "Young man, what is that you are reading from?" The young lawyer said: "That is the code of Vermont." "Well," the old country justice abruptly said, "Just stop it right there; that may be good law in Vermont, but it is d—m poor law in Missouri." The adjuster has discovered that what is good law in one state is very poor law in another. He must study the geography of his country. When he crosses the boundary line upon one side he may be a Doctor Jekyll and on the other side a Mr. Hyde. For instance, it is possible that the adjuster enters the State of Washington for the purpose of adjusting a loss; that he may represent two or three or four different companies. The policy forms are precisely alike. The facts are all precisely sim-

part, and yet a legal anomaly,—there may be a liability as to one company and not a liability as to the other. Further anomaly, there may be two policies precisely alike, with the facts precisely alike, except as to the amount of the policy, and both policies in the same company, and yet that company may be liable upon one policy under the law and not liable on the other policy under the law. Why this legal anomaly? It is because we have a dual system, a federal law and a state law, and you may find that one of the policies is not within the jurisdiction of the federal court, where the other policy is capable of being sued on in the federal court. You may find that upon a given state of facts the state court has held and holds that the company is liable, and that upon the same state of facts, the federal court has held and does hold that the company is not liable. It is possible, therefore, with the same company, the same condition, the same writers, the same endorsements and the same state of facts to be compelled to pay one policy and to defeat the other. One suggestion which was made in the paper—and now I come to a friendly criticism, practical, however, in its nature and it illustrates the point I have been trying to make,—that the law is not always alike in the same spot. The author of the paper suggests the propriety of taking an appraisal agreement. It has been my custom to advise against that course. I have been unable to discover any benefit, and I have been able to discover disaster resulting therefrom. The policy contract itself is an appraisal agreement, and contains all of the conditions and it is sufficient in and of itself for all purposes, so far as I am able to discover, of an appraisal agreement. The danger of an appraisal agreement is this. The Supreme Courts of Washington, Maine, Michigan and many of the Federal Courts have held that, if you enter into an appraisal agreement with the assured after a loss, you thereby waive the appraisal agreement contained in your policy, and waiving the appraisal agreement in the policy, that waiver carries with it the penalties which are affixed in the policy for a non-compliance with the appraisal agreement therein contained. That is to say, in the cases to which I refer, and particularly the Washington case to which I refer, the appraisal agreement was contained in the policy. The adjuster, however, entered into an appraisal agreement with the assured, and caused it to be signed,

agreeing upon the appraiser, and it had the usual attachment of the oath of office for the appraisers and the umpire, none of which are provided for in the policy, none of which the adjuster has the right to demand of the assured. In that particular case, after the appraisal agreement had been made and the appraisers agreed upon, the assured, arbitrarily, without the slightest sign of excuse or reason therefor, refused to allow the appraisal to proceed any further. He stopped right there. The company took the position that the appraisal was a condition precedent, according to the terms of the policy, and that therefore the company was not liable until there had been an appraisal. The Supreme Court of that State, however, following the decisions, I may say, of a number of other states, held that, in view of the fact that the appraisal agreement contained conditions not embraced or provided for in the policy, that it was a new appraisal agreement, and that the company, having entered into the new appraisal agreement had waived the appraisal agreement contained in the policy; that therefore having waived that, the penalties attached to the appraisal agreement in the policy were also waived and gone. In other words, they held that the very moment the pen and ink were used in signing an appraisal agreement, that moment an appraisal agreement was no longer a condition precedent to an action. That is the law of the State of Washington. I call your attention to this for the purpose of impressing upon your mind the fact that you must study the geography of your country when you start out to adjust a loss. I thank you. (Applause.)

The President: I think probably the best thing is to go to a good lawyer when you scent trouble. Are there any further remarks on Mr. Archer's paper? If not, we will proceed to the next order of business.

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS.

LIBRARY—We recommend that the President's suggestions in reference to the Library be referred to the incoming Executive Committee, with the recommendation that the cost of maintaining the Library, be distributed between this Association, the Insurance Institute, the Board and the Fire Underwriters' Inspection

Bureau, in such manner as the Executive Committee may deem advisable.

MAPS—The President has, in his address, given considerable attention to the subject of map-making by surveyors. It is an important matter, and we recommend that it be referred to a special committee, of which Mr. R. P. Fabj be made chairman.

INSURANCE INSTITUTE—Every President has recommended that the Insurance Institute be started again, and the younger men in the business have repeatedly asked for it. Moreover, the University of California has unofficially expressed a strong desire to co-operate with us in the movement. As the way to bring about resumption is to resume, we recommend that a committee of three be appointed with power to add to its number to arrange for a session of the Insurance Institute in 1909, to cover ten evenings, beginning about September next, and to enlist the co-operation of the Faculties of the Universities as far as practicable. We believe, however, it would be inexpedient to deal with other than fire insurance subjects during the first session, as the committee would have quite enough responsibility without engaging to meet the requirements of Life and Marine Underwriters.

A. W. THORNTON,
HERBERT FOLGER,
H. P. BLANCHARD,

Mr. Kinne: I move that the recommendations contained in this report be adopted as the sense of this body.

The motion is duly seconded and carried.

The President: On what will be known as "the Map Committee," referred to in the Committee's Report, appoint Messrs. R. P. Fabj, of Seattle, chairman; Jas. Wyper and Arthur M. Brown, of San Francisco.

The President: Next the election of officers.

Mr. Kinne: I move the Secretary cast the ballot for Adam Gilliland for President.

The motion was duly seconded.

The Secretary: The ballot is cast.

The President: For Vice-President Frank C. Staniford. Will the Secretary cast the ballot for Mr. Staniford.

The Secretary: The ballot is cast.

The President: For Secretary-Treasurer, Calvert Meade. I will cast the ballot myself, and it is so ordered.

For the Executive Committee: J. W. Gunn, Adam Gilliland, F. B. Kellam, W. H. Gibbons, Geo. W. Dornin.

The next important matter to consider is the Knapsack.

The President. The 33d annual session is at an end.

California Knapsack

A. W. THORNTON.....Editors.....A. C. THORNTON

VOL. XXXI.

JANUARY 5 AND 6, 1909.

NO. 1.

"A little nonsense now and then
Is relished by the wisest men."

It is a poor business or profession indeed which has not its occasional humorous features, and by the same token it is a poor body of men who are so entirely wrapped up in the serious matters of their business that they cannot enjoy, at least once in a while, the lighter side of their profession. And we will have attained our object if we can bring to your faces a smile at the few jokes and near-jokes we have garnered for the "Knapsack" from the prosaic happenings in our daily life.

Humor, if looked for, may be found sometimes in the most unexpected places—you might even find it in this year's "Knapsack."

On behalf of the Association, the editors wish to thank those who contributed articles.

The "Mark Twain" of our profession, Mr. Ed. Niles, whose bright short stories were most entertaining, and Uncle George Grant, whose memory we revere, and who for so many years ably edited the "Knapsack," are no longer with us. Their places are hard to fill. We have done the best we could and secured the somewhat doubtful services of what might be termed the "Josh Billings" and the "Bill Nye" of the business.

THE KNAPSACK.

San Francisco, December 29, 1908.

John W. Gunn, Esq., President, San Francisco:

My Dear Gunn—About two years ago, Mr. Arthur M. Brown, then President, wrote me at Seattle to prepare the Knapsack for the meeting in 1907, at which he was to preside, stating that he had appointed Mr. A. C. Thornton and myself as associate editors. To my protest on the brief notice he had given and my inability to write facetious or funny articles, he replied:

"San Francisco, December 20, 1906.

"Dear Thornton—Have you used Mrs. Winslow's Soothing Syrup? Try Lydia Pinkham's Pink Pills for Pale People. How old is Ann? Who struck Billy Patterson? Get busy and come through with the Knapsack. I have troubles of my own.

"Sincerely yours,

"ARTHUR M. BROWN."

The result is history. We did our best to amuse and please the members of the Association. The preparation of the Knapsack is no easy task, and it differs from the editing of a newspaper in Snohomish, or the publication of insurance journals in San Francisco, in this, that any kind of nonsense won't go; there must be at least some point and some merit to the Knapsack articles. Probably this is purely a matter of education, as we have always expected good things in the Knapsack and have never been disappointed, except last year.

The members of the Association seem to think that "jokes" are like "hope" and spring eternal in the (editor's) human breast. Hence not many contribute to the Knapsack and the burden falls on the shoulders of a few.

Let me contradict this impression, for it is impossible to "spring eternally" the same old jokes (even if they are "re-vamped," as my friend Speyer would say) on the suspecting members of our Association.

You and I, John, left Canada for Canada's good; you are retiring from the Presidency of the Association; for similar reasons I would like to retire as editor of the Knapsack—for the Knapsack's good.

The standard will be kept up in better style by a change, and my associate is ably qualified to carry on the good work. You and I have reached a change of life and now have to work for our salaries—minus expense accounts. An effort to do this will take up all my time at least. You can speak for yourself. Therefore, an additional reason for resigning my editorial position is lack of time.

Trusting you will pardon the length of this letter of resignation, which is to take effect on the 6th proximo, and that you will convey to the Association my thanks and appreciation for their indulgence and tolerance of my efforts in the past, believe me

Sincerely yours,

A. W. THORNTON.

The retiring President desires to state that the above resignation was by him rejected, and it is respectfully suggested to President Gilliland that Thornton (the elder) should be summarily removed from the editorship of the Knapsack, rather than be permitted to resign, because of the fact that his jokes and funny stuff have long since passed through the various

stages of decrepitude and insanity, and are now in the last stages of decomposition. *Sic Semper Senilis.*

The Hackensack Correspondence Schools of Oshkosh have instituted an insurance department. The final examinations for post-graduates are held in December of each year.

Each graduate is furnished with a diploma and a guarantee of a position in an insurance office.

This department has been highly successful from the start, and many of the graduates of this school who were in obscurity and poverty a few years ago are now famous and becoming wealthy.

The following letter by H. Togo, one of our graduates, will bear testimony to the efficiency of this system of education.

San Francisco, Dec. 1, 1908.

Hackensack Correspondence Schools, Oshkosh:

Gentlemen—Two years ago I was employed in capacity of cleanliness of cuspidor receptacles at saloon of F. Gobey on Market street. Being of studious nature, I take course of six months with your school, and now I am employ in the department of mailing in the office of South American Ins. Co. which afford me salary of 10 \$ per week, thank you, which does not include small weekly perquisite of further stipend of 20 \$ in postage stamps of U. S. Government which I find to be easily extracted from stamp drawer without exquisite knowledge of Hon. manager.

Thanking you for assistance in procuring for thrifty Japanese boy help for future career,

Resp.,

H. TOGO.

The final examinations for 1908 took place in December, four students taking the full course as follows:

Jerry Casey.

Hans Schwartzburger.

K. Hashimoto.

Isidor Epstein.

All passed with high honors, and they will no doubt soon be holding important positions in the insurance world.

Ten questions were propounded to the candidates, and they are given herewith together with the answers of each:

Q. No. 1. WHAT IS THE PRIMARY OBJECT OF INSURANCE?

Answer by Jerry Casey: "To make money; and as both sides play the game hard, there is often trouble."

Schwartzburger: "To legitimize trading on der misfortunes of others."

Hashimoto: "American insurance of primary objects, Japan-

ese student feel gratefully hopeful of conflagration, thank you."

Epstein: "To get de money ven you burn oudt."

Q. No. 2. WHAT IS THE INSURED?

Casey: "The man that the agent separates from his money whin he delivers the policy."

Schwartzburger: "A person who never has any damage from fire, undt knows more about rate-making dan any insurance man living."

Hashimoto: "Insured is honorable claimant when fierceness of heat make necessary outlay of insurance surplus, if proven by kontrak and adjuster."

Epstein: "De insured is a fool—if he don't 'do it.'"

Q. No. 3. EXPLAIN THE AVERAGE CLAUSE.

Casey: "This is agin you if you don't have insurance enough, and helps the company if you have too much, and is always agin you if the fire is in the wrong place."

Schwartzburger: "Average clause iss ven it should be, ain't ven it shouldn't be, und appears vot it never iss."

Hashimoto: "Average clause have various significance when adhering to policy. When insurance on two or more property, Japanese receive 15 per cent of loss, maybe."

Epstein: "Vat de companies get from de peoples to pay our losses."

Q. No. 4. WHEN IS THE COMPANY NOT LIABLE?

Casey: "Only when you have no policy, never ordered one, or thought there was such a thing in the world as fire insurance; otherwise some company is liable."

Schwartzburger: "Ven it iss 'made in Germany.'"

Hashimoto: "Company not liable when earthquake, volcano or civil commotion riot by undesirable citizen, or when Honorable President so declare unhelpfully."

Epstein: "Ven you don't make a goot job of it, und de adjuster discovers how it vas done."

Q. No. 5. WHAT IS A STANDARD POLICY?

Casey: "One that you take straight in proper New York form, without a 'shake' in it."

Schwartzburger: "A standard policy iss a cross between der ideas of a legislator and an insurance lobby."

Hashimoto: "Standard policy is kontrak of desirability by Japanese merchant. Honorable Insurance Commissioner of Province by legislation hold many thoughtfully devised phrases as causing to be heeded by holders of insurance funds."

Epstein: "I hope to die if I know vat it is."

Q. No. 6. WHAT IS AN APPRAISEMENT?

Casey: "A fight to a finish with three men in the ring. The insurance company is generally made to stand the blows."

Schwartzburger: "An appraisement iss someting governed

by de only clause in der policy vich permits der assured to make a profit."

Hashimoto: "Appraisement is caused by dispute between three umpires as of value for emoluments to be derived from overruling decision of any two. Sometimes resulting in unpleasantness and absence of courtesy."

Epstein: "Appraisement is to get two friends, ven de company has only vun, dat vill say de goots vas almost ruined."

Q. No. 7. WHAT IS A FLOATING POLICY?

Casey: "The same as an annual pass on the railroad, except that you have to pay something for it. It goes most anywhere any time."

Schwartzburger: "A floating policy iss von vich floats, and floats, and floats—until it floats so far oudt you can't see it."

Hashimoto: "Floating policy is marine insurance on boats of which Japanese student holds himself absolved from innocence."

Epstein: "Floating policy is vun vich pays 100 per cent for vater damage."

Q. No. 8. WHAT IS THE FIRST THING TO DO IN CASE OF LOSS?

Casey: "Get the money, of course. Never mind the receipt."

Schwartzburger: "First separatè der Rhine from der Moselle, und der Austrian from der Phoenix, den hoch der Kaiser."

Hashimoto: "When conflagration loss occur, first preservation of mind and merchandise as per kontrak, if valid. Observe carefully dates of policy, and by electric communication of Wells-Fargo convey cheerful decision of remaining news to Hon. Company, if still existing."

Epstein: "Shut de doors und de vindows tight; tell de ad-juster dat you are a ruined man, and claim a total loss."

Q. No. 9. GIVE YOUR VERSION OF A NON-WAIVER AGREEMENT.

Casey: "An arrangement that don't count for annything unless both sides are satisfied when they get through."

Schwartzburger: "Dot is a paper vich caused more trouble mit less results dan anything after der Big Conflagration."

Hashimoto: "Non-waiver agreement is where enjoyment of loss is held as of no dispute by either party until it is further impartially declared by Honorable Adjuster that company may or may not be deprived of benefits."

Epstein: "Non-waiver agreement iss someting you don't sign unless you can't help it."

Q. No. 10. HOW MANY RESTRICTIONS IN A POLICY, AND WHAT ARE THEY?

Casey: "There's plenty of thim, but don't worry about thim if you get the policy from an agint that is a good fellow with a handy mimory."

Schwartzburger: "Three restrictions in a policy: Dot vich says you can't, dot vich says you don't, und dot vich says you shouldn't."

Hashimoto: "Restrictions in a policy are of such a numerous volume that Japanese student is uncontrollable by their velocity, and apprehended by the utmost astonishment."

Epstein: "Just vun restriction—don't get caught at it."

LETTER FROM NEW COUNTRY AGENTS.

Blank Insurance Co., San Francisco:

Gentlemen—Silas Jameson, who has a good house and barn near town, wants to insure. Please send policy at once—it has an addition to it and is now 34x42. I have put in the record book so that it may not be uncovered.

Yours truly,

JOSHUA MEDDERS, Agent.

P. S. Please send supply of blotters, rulers and calendars.

The following is the wording of a daily report recently received by a manager in San Francisco:

ASSURED—Madame Pluff.

\$10,000—On her natural hair, her own or held by her in trust, or on commission, or sold but not removed, all while contained, etc.

WHAT WE WOULD LIKE TO KNOW.

By William Maris.

I'm a stranger in your city,
And of information shy,
There are several things I want to know:
Who can tell the reason why?

Why am I standing reading this,
A mighty nervous guy,
Instead of keeping out of sight?
Will someone tell me why?

Tom Roberts cancels saw mills,
Writes an oil warehouse nearby;
Tom's a dandy underwriter, but—
Does anyone know why?

Who can tell why Larry Lamping
Pulls his shoes on with a sigh—
Shoes number twelve on feet sixteen—
Is that the reason why?

Ross Island down by Portland
 Rod Smith never passes by,
 For crawfish or for other things—
 Can anyone say why?

Thornton was a special;
 A boss now, great and high.
 How is it? Brains, hot air or gall?
 Now who can tell me why?

Last night they say that Raymond
 Wore to bed his shirt and tie,
 His pants, his boots and overcoat;
 Can he remember why?

Of all the crazy spelling
 That ever met my eye,
 Is that damn "j" in Fabj's name;
 I never could tell why.

Jim Dennis takes to politics
 Like a pig takes to his sty;
 Is that because he's Irish?
 Is that the reason why?

How can Thornton read a telegram
 Without a single sigh
 To me about Port Blakeley?
 Is there any reason why?

(By the Editors.)

Good adjusters get but fifteen per,
 To earn it hard they try,
 While Maris asks for twenty "bucks"—
 Can anyone tell why?

FAMILIAR SAYINGS BY FAMOUS MEN.

"What do you think of our new building?"—Rolla V. Watt.

"How much will you write on the Emporium?"—Wm. Macdonald.

"Let's go round to Grim's."—T. J. Conroy.

"When I was a newspaper man in Snohomish——"—John W. Gunn.

"The whole matter should be revamped."—Walter M. Speyer

"A safe, sound and sane policy."—Bernard Faymonville.

"I'll ask Brother George."—John C. Dornin.

"I heartily endorse special agents' associations."—Geo. H. Tyson.

"Letts' forget it."—J. P. Treanor.

"I can figure it out with a stub pencil on a shingle."—Uncle Bill Sexton.

"The Board is infallible."—Chas. D. Haven.

"When I was a special agent——"—H. P. Blanchard.

"Apropos of that, have you heard the latest? It's great."—John T. Fogarty.

"I don't know Harvey O'Bryan."—E. T. Niebling.

"Sexton's solution is wrong——"—Col. Kinne.

"'Occasioned' and 'caused' are not synonymous terms."—W. H. Lowden.

"It's a joke. The Colonel thinks I can work his rule."—W. H. Raymond.

"Wasn't our 'Knapsack' fine last year?"—A. C. Thornton.

"Business? There is no business."—A. E. Bailey.

"It was a great piece of financiering."—Wm. J. Dutton.

"Bet you ten to one we win the Port Blakeley suit."—A. W. Thornton.

"Semi-managerial positions."—A. P. Lange.

"Now, I'll tell you why the Traders failed."—Harry Gordon.

"Then the residue must be reapportioned."—R. De Lappe.

"Patronize all companies equally."—C. H. Ward.

"There's no joker in this form."—Alex. Field.

"Have you seen Col. Morrison?"—D. W. Pierce.

"Diplomats never commit themselves by 'yes' or 'no.'"—Alfred Stillman.

"I'm worth the extra five."—Wm. Maris.

"No thanks, I never drink."—F. C. Staniford.

"I'll shake you the bones for it."—J. J. Dennis.

"The sprinklers worked all right at Blaine."—W. S. Davis.

"There's nothing in the brewery business."—H. R. Burke.

"The position is not worthy of my consideration."—W. H. Gibbons.

COPY OF "AD" IN COUNTRY PAPER.

CALLENDERS FOR SALE—Being as I am an agent for several Inshurance Companies and always receive each year about this time a large number of Beautiful Callenders for Free Distribushion among my customers, I therefore offer these callenders for sale at the rediklus low price of 6½ cents each. What Is Handier or More Ornamental in the house than a Callender? If you don't have no callender in the house, you can't tell whether its January or December. Come and see these callenders at onct. Your choice for 6½ cents, 2 for 13 cts. First Come First Served. Yours for callenders, AMOS HILLYER, Attorney, Legal Light, J. of the P. and Inshurance Agent, Bingville.

AN INTERPRETATION.

By Miss F. L. Grippen.

He went to dine;
 He ordered wine;
 The Special, so they say.
 When to his head
 The wine it sped,
 Discretion flew away.

Right next to him
 So chic and trim—
 She sat—fair Rosalie.
 Her hand he seized,
 Her hand he squeezed.
 "How dare you, sir!" cried she.

With head held high,
 And flashing eye—
 She turned in righteous wrath.
 "Young man, beware;
 Wine sets its snare
 Along the downward path."

Then out he took
 His little book—
 "The Special Agent's Guide."
 "Come, read, be wise,
 For herein lies
 Some risks I've classified."

A manner bold,
 A bottle cold—
 A stolen rendezvous.
 A bird that's hot,
 All care forgot.
 Joy reigns its hour or two.

A pony choose
 To win or lose—
 A friendly game of draw.
 A choice front seat
 When pretty feet
 Trip through the "Pas-Me-Las."

"There is no need
To further read"—
Here interrupted she—
"From that short list
There's nothing missed,
As far as I can see."

"Of tariff rates,
Rules and rebates,
You have not said a word."
"Here's my excuse:
Pray, where's the use,
These risks are marked 'preferred.'"

"All wrong, you say?
Fair maiden, nay
What lends to life a spice
I classify,
And specify,
As strictly PROPER VICE."

ABOUT THE FIRE INSURANCE BUSINESS.

We will have fire plucks and aperatus in here in 20 days. I will have a pluck ride at my corner in case of Fire. I am well suplead with water. I have 4 Wisky barrel full over the house and I kan redge with the hose all over, and I have forse enough to trow a stream of water over the house. If the party you give me on the slip turn up I will notify you ameditly at present at is slow here but I will help in person to put in a mill as soon as I can see my way out to git dobble my money back. I may be out nagst week and you will find my check of the amount witsh I own Smith Co. \$12.25 by nagst mail.

Check in the letter.

Mey best regarst.

A LETTER FROM JAPANESE FRIENDS.

Insurance Company, San Francisco:

Gentlemen—Please pardon me to report to you as your kindness of fire insulance on our building. As this matter, Hon. Jones & Co. instrcted to us more fast than you do, and we gave them the fire insulance.

So your policy was received unhopefully, and we forget long time to write to you.

Now we return the policy with thanks.

Respectfully,

K. HASHIMURU.

HOW IT APPEARED TO HER.

A Kansas paper says that the regular reporter was taking a vacation, and the editor was busy in the office, so when it was learned that on the previous evening there had been a fire in a remote part of the city the young lady who writes the society news was sent to bring in a report of it for the paper. She came into the office an hour later with the following very interesting account: "Quite a number of people in this part of the city attended a fire last night at the residence of Mr. and Mrs. Blank in Thirteenth street. Some went in carriages and buggies, but a majority walked. The alarm was sounded about 9:30 and many who attended the fire had just returned from church, consequently they were already dressed for the occasion. Mr. Blank was not at home, being out of the city on business; hence the affair will be quite a surprise to him when he returns. Mrs. Blank wore a light percale kimono and had her hair done up in kid curlers. The firemen responded readily and worked heroically to subdue the seething flames. Most of them were young and fairly good looking. They were dressed in oilcloth suits cut short, with trousers to match. Their hat rims were narrow in front and broad behind and sagged down in the rear. The chief's hat was ornamented with an octagonal brass spike which stuck up above his head like a horn, giving him the appearance of a unicorn. When the flames broke out through the second story and cast a lurid hue over the surrounding buildings the view was one never to be forgotten. At a late hour the sightseers went home, and all felt that they had passed an evening full of interest and excitement."—Exchange.

Letter addressed to Leslie Lord, special agent, in answer to inquiry regarding change of firm name:

"Phoenix, Ariz., Dec. 26, 1908.

"DEAR LORD:

"Thy will be done. Greatly do we feel our negligence of thee; forgive us this time and make us to feel that the dissolution we have just undergone will not only be acceptable to thy will but will better fit us to work for thy cause. We beseech thee to accept us in the future as thou hast in the past and remember that while we are weaker in number, we are stronger in power, and with thy assistance we expect to heap up treasures somewhere. Strengthen the companies by building for them bigger premiums and fewer losses and use us in aiding thy work. Bless the special agents everywhere—especially if they interfere with thy cause; remove temptations from them and lead them NOT in the paths of the wicked, for thou knowest, DEAR LORD, that they are weak in the flesh if not in purse. May our reports each week be stronger and better and may the risks

we write never become inflames. All of this we ask in thy name and the name of thy company (as well as any of the companies we represent), Selah.

"Visit us often in person, do unto us as thou hast done in the past, accept the risks we offer, whether they be good or bad, and finally save us from the flames of destruction, for in so doing the company will reward thee openly. Amen.

"Yours sincerely,

"HARRY KAY & CO., Agents.

"Per H. W. Berryman."

"A match,
A scratch,
A fire follers.
A wreck,
A check,
\$10,000."

NOTES FROM THE BILLTOWN CLARION.

Yesterday a big fire came near burning up the town. Widow Briggs' chicken house on Willow street burned to the ground. The Fire Department did excellent work and got around shortly after the fire was over. When the fire broke out Lem Jasper, the Chief, was using the chemical engine and the apparatus to spray the fruit trees in the orchard on his west forty, and prompt action was a bit delayed.

The chicken house was a total loss and was insured for \$150. Hoke Tracey, the popular Insurance Agent, has telegraphed for an Adjuster.

A meeting of the Village Council was held in the Opera House last Tuesday night after band practice, Josh Bilkins presiding. The matter of insurance rates in this town was fully discussed, and it was the unanimous opinion of all present that they are entirely too high. Rube Purdy, who runs the store, says that last year he paid over \$26 to the Insurance Companies and now the slick robbers want \$28 to renew his policies. He says if he did have a fire he would likely have to law for his money anyhow. There has been a like increase all over this section since the San Francisco fire in 1906, and it is time something was done to check the greediness of these corporations. Undoubtedly they have collected right here in this County enough money to re-imburse them for their entire losses in San Francisco. John W. Whoop, our genial representative, says he will attend to their case at the next meeting of the Legislature.

Upon request of several members, the following problems are inserted in the Proceedings, and the views of our members can be written the Secretary for publication in the Thirty-fourth Annual Edition.

SHORT RATE CANCELLATIONS

where there has been a change in rate during the life of the policy:

EXAMPLE I.

\$5000 1 year at 1 per cent\$50.00
At the end of 3 mos. rate inc. to 1½ A. P..... 18.75

Net premium received\$68.75

It is desired to cancel at the end of six months, short rate.

FIRST METHOD:—

Premium 1 year at 1½ per cent.....\$75.00
70 per cent earned..... 52.50

Return premium\$22.50

SECOND METHOD—

Net premium received.....\$68.75
Earned 70 per cent of \$75.00 52.50

Return premium.....\$16.25

THIRD METHOD—

Net premium received.....\$68.75

Premium 1 year at 1 per cent.....\$50.00

Earned premium 6 mos. 70 per cent.... 35.00

In force 3 mos. at 1 per ct P. R. of.... 35.00—17.50

Premium 1 year at 1½ per cent 75.00

Earned premium 6 mos. 70 per cent... 52.50

In force 3 mos. at 1½ per cent P. R.

of 52.50—26.25

Total earned premium 43.75

Return premium\$25.00

EXAMPLE II.

\$5000 1 year at 1½ per cent.....\$75.00
At the end of 3 mos. rate reduced to 1 per ct R. P 18.75

Net premium received.....\$56.25

It is desired to cancel at the end of six months short rate.

FIRST METHOD—

Premium 1 year at 1 per cent	\$50.00
70 per cent earned	35.00
	<hr/>
Return premium	\$15.00

SECOND METHOD—

Net premium received	\$56.25
Earned 70 per cent of \$50.00	35.00
	<hr/>
Return premium	\$21.25

THIRD METHOD—

Net premium received	\$56.25
Prem. 1 year at 1½ per cent	\$75.00
Earned 6 mos. 70 per cent	52.50
In force 3 mos. at 1½ P. R. of	52.50—26.25
Prem. 1 year at 1 per cent	50.00
Earned 6 mos. 70 per cent	35.00
In force 3 m. at 1 per cent P. R. of ...	35.00—17.50—43.75
	<hr/>
Total earned premium	\$12.50

NOTE REGARDING EXAMPLES I and II.

It will be observed that each risk was in force for three months at 1 per cent and for three months at 1½ and equity, therefore, would require that the earned premium in each case should be the same, and this result is reached if the **third method** be used.

If the first method be used, as is customary by many agents, the amount of earned premium is made to depend upon the mere accident of whether the higher or lower rate was first effective.

The writer therefore endorses the third method, and recommends that companies require their agents to put it into effect.

EXAMPLE III.

\$5000 at 1 per cent 1 year from Jan. 1st	\$50.00
Feb. 1st rate increased to 1.25 A. P	11.46
	<hr/>
	\$61.46
April 15th rate reduced to 80c R. P.....	15.94
	<hr/>
Net premium received	\$45.52

It is desired to cancel August 15th, short rate, and the writer suggests that the proper method would be the following:

Premium 1 year at 1 per cent	\$50.00
Earned 7½ mos., 78 per cent	39.00
In force 1 m. at 1 per cent, 30-225 of	39.00— 5.20
Prem. 1 year at 1.25	62.50

SHORT RATE CANCELLATIONS.

Earned 7½ m., 78 per cent	48.75	
In force 2½ m. at 1.25, 75-225 of	48.75	—16.25
Premium 1 year at 80c.....	40.00	
Earned 7½ mo, 78 per cent	31.20	
In force 4 mo at 80c , 120-225 of	31.20	—16.64
Total earned premium		<u>38.09</u>
Return premium		7.43

The percent earned for 7½ months—78 per cent—is applied to each rate, and then distributed proportionately according to the number of days that each rate was effective.

The chief objection that the assured or agents could raise would be that the foregoing method is not so simple as cancellation at the last rate, and possibly in order to avoid long calculations, agents might be inclined to cancel pro rata at the old rate and re-write at the new rate for the unexpired time instead of changing the rate by endorsement.

By such a method the company would earn

1 month at 1 per cent	\$ 4.16
2½ months at 1.25	13.02
4 months, S. R. at 80c.....	<u>20.00</u>

A total earned premium of \$37.18 against \$38.09 by the method used in Example III.

CANCELLATION OF REINSURANCE POLICIES,

where the reinsurance commences after the inception of the policy reinsured.

EXAMPLE I.

\$5000 at 1 per cent 1 year premium.....	\$50.00
After 3 mos. \$2500 reinsured, reins. prem.	18.75

FIRST METHOD—

At the end of 6 mos. cancelled S. R. Orig. prem ...	\$50.00
Earned 70 per cent	<u>35.00</u>
Return premium	\$15.00
Reinsurance return premium ½	7.50

SECOND METHOD—

Reinsurance premium paid	\$18.75
Reinsurance in force 3 moš.	
Earned premium ½ of ½ of \$35.00 (earned prem. on policy reinsured)	<u>8.75</u>
Correct reinsurance return premium	\$10.00

It will be observed by the latter method, although the reinsuring company refunds \$10.00 to the reinsured company when the latter has only paid out \$15.00, the reinsuring company earns \$8.75 for three months against \$17.50 earned by the original company for three months, and it is in the earning, rather than in the cash adjustment, that the proportions should be considered.

EXAMPLE II.

The following is an actual case that has come under my observation:

Original policy written for \$3000, 2.55 premium for 1 year from August 21, '07\$76.50

The transactions on the original risk are the following:

August 21, rate reduced to 2.21, ret. prem . . .	\$10.20
Nov. 24, rate reduced to 1.71, ret. prem	11.13
April 9, rate reduced to .70, ret. prem	11.11
May 1, rate reduced to .65, ret. prem. . . . .	.46
July 14, cancelled short rate, ret. prem	1.00
Total refund	<u>33.90</u>

Total earned premium \$42.60

The reinsurance transactions are the following:

\$2000 at 1.71 prem. \$24.22 from Dec. 6, '07 to Aug. 21, '08	\$24.22
April 9, rate red. to .70, ret. prem.	\$ 7.40
May 1, rate red. to .65, ret. prem . . . . .	.30
Total rebates	\$ 7 70
Net reinsurance premium paid	\$16.52

- (a) To arrive at the Reins. Ret. Prem. at time of cancellation, July 14, the following method was used: Since the orig. pol. (3000) earned from Dec. 6-April 9 (123 days) at the rate of .1425 per day, the reinsurance (2000) earned 2-3 of this, or .095 per day, for 123 days11.67
 From April 9-May 1, the original policy earned .0583 per day and the Reins. .0388 for 22 days. . . .86
 From May 1-July 14 the orig. pol. earned .05727 per day and Reins. .03818 per day for 73 days. . . 2.78

Total earned.....	15.31
Reins. Ret. Prem.....	1.21

- (b) It has been suggested, however, that the Reins. Ret. Prem. should have been figured in the following manner:

Net Reins. Premium paid..... 16.52

SHORT RATE CANCELLATIONS.

From Dec. 6-April 9, 123 days, 2000 at 1.71—	
.65 or 1.06 21.20.....	7.24
April 9-May 1, 22 days at .05 1.00.....	.06
Dec. 6, '07-July 14, '08, 218 days, 2000 at .65, 13.00, 218-323 of 95 per cent of 13.00.....	8.34
Total Reins. earned Prem.....	<u>15.64</u>
Reins. Ret. Prem.....	.88





GEORGE W. SPENCER.

George W. Spencer

We are called upon to record the passing of one of our oldest members; in fact, one of the founders of our association, Mr. George W. Spencer. He was a native of New London, Connecticut, and was at the time of his death sixty-five years of age. During the Civil War he served as a private and later as color sergeant of a Pennsylvania cavalry regiment. After the war he went to Tahiti as clerk for the American Consul; coming to San Francisco in the year 1868, when he entered the service of the Aetna Insurance Company, under the general management of the dean of our profession, Mr. George C. Boardman. In 1880, he was called to the management of the insurance department of Messrs. Balfour, Guthrie & Co., which position he retained until 1906, when he again entered the service of the Aetna as joint general agent with his former employer, Mr. Boardman. No greater compliment could have been paid to his eminent ability as an underwriter.

He was a faithful friend and never spared any effort to render a favor or in returning an obligation. As an underwriter he had few equals. He acted on many important committees of the Pacific Board, and always with credit to himself and profit to the fraternity.

His valuable services as chairman of the Adjusting Bureau after the recent conflagration in this city will ever be remembered. Nothing but a wonderful physical as well as mental strength could have carried him through.

This association, in the death of Mr. Spencer, has lost one of its most active and efficient members. The insurance community has lost one of its oldest and most prominent associates—a man who was a natural born fighter for the right. His enlistment as a soldier during the Civil War, his joining the National Guard during the Kearny riots prove this.

Those of us who have been personally intimate with him will ever cherish his memory with deepest affection.

WM. MACDONALD,
WM. SEXTON,
E. C. MORRISON,
Committee.

Fred Rod Stover

At a special meeting of the Fire Underwriters' Association of the Pacific, held on the 21st day of December, 1907, the following memorial was unanimously adopted:

On the 20th day of December, 1907, there passed from this life Fred Rod Stover, special agent and adjuster of the Royal Insurance Company of Liverpool.

Mr. Stover was born in the State of Nevada on the 9th day of December in the year 1867. While still a child his parents journeyed to California, taking up their residence in the town of Colusa, Colusa County. After the death of his father, Dr. Stover, his mother moved to Oakland, where he attended the Wright Private School for Boys. Taking a course in civil engineering, he made rapid progress, and upon leaving school was engaged by the Southern Pacific Railroad Company. Tiring of this following, he decided to engage in the fire insurance business, and in 1887 accepted a position in the office of Nathaniel T. James, representing the Union Insurance Company of San Francisco, California.

From this office Mr. Stover resigned to take a position in the office of the Pacific Insurance Union, where, through industry and careful attention to business, he was advanced to the position of assistant to the late Charles M. Nichols, chief surveyor, remaining with the Pacific Insurance Union and its successor, the Board of Fire Underwriters of the Pacific, as surveyor, until 1895, when he was employed by the Commercial Union office as special agent.

In 1897 he received and accepted an offer from the Scottish Union and National Insurance Company, with which company he remained, occupying the position of senior special agent and adjuster, up to the time that company discontinued its Pacific Coast Department, in February, 1907. The following April he joined the field staff of the Royal Insurance Company, and, as previously mentioned, was in the service of that company at the time of his death.

During his career as a special agent he had traveled every State on the Pacific Coast, also British Columbia, Colorado and New Mexico. He was well and favorably known to the agents throughout this large territory, who respected him for his gentlemanly qualities, sincerity of purpose, and for his firm and steadfast convictions of justice and truth.

A faithful friend, a devoted son, one whose nobility of character was exemplified by a blameless private as well as public life, his death will be a great loss to all who knew him, to the insurance fraternity, and to this association, which, by his demise, loses an honored member and true friend.

P. de S. OLNEY,
J. M. MURPHEY,
T. J. A. TIEDEMANN,
Committee.



FRED ROD STOVER.



LOUIS LEAKE BROMWELL.

Louis Leake Bromwell

The final closing of an earthly career brings to the friends the thought that no longer can be continued the pleasant relationship of the past. The account is closed and we must bow in respectful recognition to the inevitable. It is therefore fitting and proper that we at this time place upon our records a tribute to the memory of our departed member.

Louis Leake Bromwell was born in Cincinnati, O., on the 17th day of July, 1846, received his education in the public schools of that city, and at the age of sixteen enlisted in the army of the United States, later being stationed in the Navy Department and attached to the U. S. ship Reindeer. He served with honor and distinction until the close of the war. On his return to Cincinnati he entered the office of the Phoenix Insurance Company of Hartford, where after having served a time was sent to California by Mr. Henry Magill, then manager of the company. He entered the office of Arthur Magill with the Phoenix and Home in 1870. About the year of 1880 he was elected president of the California Insurance Company, serving until that company retired from business. He was appointed Pacific Coast manager for the Milwaukee Mechanics, and continued in the position until the fire of April, 1906. As an underwriter he had few superiors—correct in his opinions, careful and competent, a man of unusual courage. Many of us will miss his genial friendship and intellectual personality.

As an evidence of our appreciation of the worth of the departed member of our association, be it

Resolved, That in the death of Louis Leake Bromwell there has been removed one who was a friend to all, a man of sterling qualities, strong personality, bright disposition and faithful in the discharge of every duty.

Resolved, That this association deeply deplores the loss of one so long connected with us as a friend and adviser, and that we hereby bear tribute to his ability as an underwriter and his loyalty as a friend.

Resolved, That our heartfelt sympathy be extended to his widow and family.

Resolved, That the secretary place this memorial upon the records of the association and forward a copy of the same to the widow of our late member.

E. P. FARNSWORTH,
C. MASON KINNE,
C. H. WARD,

Committee.

William John Landers

In the death of Wm. J. Landers we mourn the loss of an esteemed member, who was one of the organizers of our Association, and one of our first contributors of valuable treatises on insurance topics.

Mr. Landers was born in Brooklyn, New York, September 17, 1851, and died at Santa Barbara, California, February 5, 1908.

He commenced his insurance career at the age of twenty, and five years later occupied a managerial position. At the time of his death he was manager for the Pacific Coast of the London Assurance Corporation of London and the Niagara Fire Insurance Company of New York.

Possessing a trained, logical and analytical mind, and being a thorough student of underwriting, with broad and extensive experience, Mr. Landers' counsel and advice on insurance matters were uniformly given marked consideration. He ranked amongst the highest as an underwriter of ability and as a man of honesty and integrity.

Many of Mr. Landers' employes were with him for nearly a score of years, esteeming him highly for his kindness and consideration at all times.

Resolved, That this tribute of our esteem be recorded in the Proceedings of the Association, with which he was so long identified, and that an engraved copy be tendered to his bereaved family.

A. W. THORNTON,
CHAS. D. HAVEN,
LOUIS WEINMANN,

Committee.



WILLIAM JOHN LANDERS.

Byron C. Dick

During the early months of the past year Byron C. Dick, one of the charter members of this association, was taken from our midst.

The early life of Mr. Dick was spent in Wheeling, W. Va. He then came to California and in 1876, when the Fire Underwriters' Association was organized, he was agent of the Kansas Insurance Company in this city. Mr. Dick later was connected with the Sun Insurance Company of San Francisco until that company was absorbed by the Fireman's Fund. He then entered the office of Butler & Haldan as special agent and adjuster, which position he held until his retirement from business some five years ago.

Although Mr. Dick was naturally of a reserved and quiet disposition, he was known among his friends as a kind and conscientious man, and always loyal to those whose interests were entrusted to his care.

W. H. GIBBONS,
R. GALLEGOS,
DIXWELL HEWITT,
Committee.

Charter Members of the Underwriters' Association of the Pacific

Organized February 23, 1876.

- Bailey, Jas. D., General Agent, Union Insurance Co.
 *Barnes, E. T., General Agent, California Insurance Co.
 Bigelow, H. H., General Agent, Home Mutual Insurance Co.
 Brush, R. G., City Agent, State Investment & Insurance Co.
 *Brown, Edw., General Agent, Faneuil Hall & Lycoming Insurance Cos.
 *Bromwell, L. L., Special Agent, Phoenix and Home Insurance Cos.
 *Bryant, A. J., President State Investment & Insurance Co.
 *Callingham Wm. J., General Agent, Royal Canadian Insurance Co.
 *Clark, Z. P., Agent, German-American Insurance Co.
 *Dick, B. C., Agent, Kansas Insurance Co.
 Dickson, Robt., Manager, Imperial, Northern & Queen Insurance Cos.
 *Doolan, Wm., Special Agent, State Investment & Insurance Co.
 *Dornin, Geo. D., Secretary, Fireman's Fund Insurance Co.
 *Garniss, J. R., Adjuster.
 *Grant, Geo. F., Special Agent, North British & Mercantile Insurance Co.
 *Gunnison, A. R., Special Agent, Commercial Insurance Co. of California.
 *Hart, J. W., Agent, Scottish Commercial Insurance Co.
 *Houghton, J. F., President, Home Mutual Insurance Co.
 *Landers, Wm. J., Manager, San Francisco Agency, Guardian Assurance Co.
 *Lowe, B. F., Adjuster.
 Macdonald, William, Surveyor, Board of Fire Underwriters.
 Magill, R. H., General Agent, Home Mutual Insurance Co.
 Potter, E. E., of Potter, Jacobs & Easton, General Agents.
 Sexton, Wm., Special Agent, Fireman's Fund Insurance Co.
 Smith, A. D., General Agent, Northwestern, Amazon & Fairfield Insurance Cos.
 *Smith, Henry, Special Agent, Liverpool & London & Globe Insurance Co.
 Snow, H. W., Special Agent, Commercial Union Assurance Co.
 *Spencer, Geo. W., Special Agent, Aetna Insurance Co.
 *Staples, J. W., Adjuster.
-
- *Deceased.

OFFICERS AND COMMITTEES

List of Officers and Committees of the Fire Underwriters' Association of the Pacific since organization:

Year.	President.	Vice-President.	Sec.-Treas.
1876	*Benjamin F. Low	Henry H. Bigelow	*John W. Staples
1877	*George D. Dornin	*Wm. L. Chalmers	*John W. Staples
1878	*Augustus P. Flint	*Edward Brown	*John W. Staples
1879	*Casper T. Hopkin	Andrew D. Smith	*John W. Staples
1880	*Geo. W. Spencer	E. W. Carpenter	*John W. Staples
1881	*L. L. Bromwell	*Geo. F. Grant	*John W. Staples
1882	*George F. Grant	E. W. Carpenter	*John W. Staples
1883	E. W. Carpenter	William Sexton	*Robert H. Naunton
1884	William Sexton	C. Mason Kinne	*C. P. Farnfield
1885	C. Mason Kinne	*Zenas P. Clark	*Robert H. Naunton
1886	*Zenas P. Clark	*John W. Staples	*Robert H. Naunton
1887	*John W. Staples	*Wm. L. Chalmers	Bernard Faymonville
1888	*Wm. L. Chalmers	L. B. Edwards	Bernard Faymonville
1889	L. B. Edwards	*Wm. J. Callingham	Thomas W. Fenn
1890	B. Faymonville	Wm. H. Lowden	*Robert H. Naunton
1891	Wm. H. Lowden	Henry M. Grant	George H. Tyson
1892	Henry M. Grant	Stephen D. Ives	Edward Niles
1893	Stephen D. Ives	Rolla V. Watt	Russell W. Osborn
1894	Rolla V. Watt	V. Carus Driffield	Russell W. Osborn
1895	V. Carus Driffield	Herbert Folger	Louis Weinmann
1896	Herbert Folger	R. W. Osborn	Louis Weinmann
1897	R. W. Osborn	Edward Niles	Calvert Meade
1898	Louis Weinmann	Louis Weinmann	Calvert Meade
1899	Edward Niles	Frank J. Devlin	Calvert Meade
1900	Frank J. Devlin	Geo. W. Dornin	Calvert Meade
1901	Geo. W. Dornin	Wm. H. Gibbons	Calvert Meade
1902	Wm. H. Gibbons	Whitney Palache	Calvert Meade
1903	Whitney Palache	Jacob L. Fuller	Calvert Meade
1904	Jacob L. Fuller	A. W. Thornton	Calvert Meade
1905	A. W. Thornton	F. B. Kellam	Calvert Meade
1906	F. B. Kellam	Arthur M. Brown	Calvert Meade
1907	Arthur M. Brown	John W. Gunn	Calvert Meade
1908	J. W. Gunn	A. Gilliland	Calvert Meade

*Deceased.

EXECUTIVE COMMITTEE.

1876	*L. L. Bromwell	*James R. Garniss	*George F. Grant
1877	*Edward Brown	William J. Sanders	Andrew D. Smith
1878	Andrew D. Smith	Oliver H. Cole	*George W. Spencer
1879	*Augustus P. Flint	William Macdonald	*Albert R. Gunnison
1880	*George F. Grant	*Edward Brown	Oliver H. Cole
1881	*Geo. W. Spencer	E. W. Carpenter	C. Mason Kinne
1882	Thomas E. Pope	Andrew D. Smith	*Thomas A. Mitchell
1883	*George F. Grant	Harvey W. Snow	Oliver Hawes
1884	*George F. Grant	Harvey W. Snow	Oliver Hawes
1885	*George F. Grant	Harvey W. Snow	Oliver Hawes
1886	*H. K. Belden	*George F. Ashton	Calvert Meade
1887	*H. K. Belden	*George F. Ashton	Calvert Meade
1888	*W. J. Callingham	George C. Pratt	Rolla V. Watt
1889	B. Faymonville	Wm. H. Lowden	*Henry K. Belden
1890	*H. K. Belden	*George Easton	Henry M. Grant
1891	*H. K. Belden	*George Easton	Alfred Stillman
1892	Alfred Stillman	*George Easton	V. Carus Drifffield
1893	V. C. Drifffield	Wm. H. Lowden	William Sexton
1894	Herbert Folger	Franz Jacoby	Jas. H. De Veuve
1895	R. W. Osborn	Frank J. Devlin	John T. Fogarty
1896	Frank J. Devlin	George W. Dornin	Whitney Palache
1897	*Frank G. Argall	Edward Niles	Robert P. Fabj
1898	Whitney Palache	*Wm. H. Bagley	Leslie A. Wright
1899	John T. Fogarty	Alfred R. Grim	Whitney Palache
1900	Edward Niles	Wm. H. Lowden	Russell W. Osborn
1901	Frank J. Devlin	Rolla V. Watt	William Sexton
1902	Geo. W. Dornin	Herbert Folger	Louis Weinmann
1903	W. H. Gibbons	Herbert Folger	Louis Weinmann
1904	Whitney Palache	W. H. Gibbons	George W. Dornin
1905	J. L. Fuller	A. W. Thornton	W. H. Gibbons
		Whitney Palache	George W. Dornin
1906	A. W. Thornton	F. B. Kellam	R. W. Osborn
		Louis Weinmann	Herbert Folger
1907	F. B. Kellam	Arthur M. Brown	Herbert Folger
		W. H. Gibbons	J. L. Fuller

LIBRARY COMMITTEE.

1876	*Geo. W. Spencer	Robert M. Magill	*Byron C. Dick
1877	*James W. Hart	Hugh Craig	Samuel D. Mayer
1878	J. W. Kinsley	*Geo. W. Spencer	Ludwig Beck

*Deceased.

LIBRARY COMMITTEE—Concluded.

1879	Oliver H. Cole	Jos. C. Jennings	*Wm. J. Landers
1880	Geo. E. Butler	*Edward Brown	Chas. J. Van Tassel
1881	*John W. Staples	*Wm. J. Callingham	*Robert H. Naunton
1882	*Geo. W. Spencer	*Samuel O. Hunt	*John W. Staples
1883	*John W. Staples	*Geo. W. Spencer	*Robert H. Naunton
1884	*Casper T. Hopkin	*Geo. D. Dornin	*Andrew J. Bryant
1885	*Geo. W. Spencer	William Sexton	*Samuel O. Hunt
1886	*Geo. W. Spencer	William Sexton	
1887	*Geo. W. Spencer	Rudolph Herold Jr.	Thos. E. Pope
1888	*Geo. W. Spencer	Edwin W. Carpenter	*John W. Staples
1889	*Geo. W. Spencer	Edwin W. Carpenter	*John W. Staples
1890	*Geo. W. Spencer	Edwin W. Carpenter	
1891	*Geo. W. Spencer	Edwin W. Carpenter	*Alex. J. Wetzlar
1892	*Geo. W. Spencer	Herbert Folger	Jas. H. De Veuve
1893	Herbert Folger	*Henry K. Belden	Richard C. Medcraft
1894	*Alex. J. Wetzlar	A. G. Dugan	Benj. J. Smith
1895	A. G. Dugan	Herbert Folger	Edw. P. Farnsworth
1896	*Frank G. Argall	George W. Dornin	*Charles C. Echlin
1897	William Maris	*Charles C. Echlin	Herbert Folger
1898	Herbert Folger	Benj. J. Smith	Frederick B. Kellam
1899	Herbert Folger	H. McD. Spencer	Whitney Palache
1900	Herbert Folger	Frederick B. Kellam	*Frank G. Argall
1901	Jacob L. Fuller	Charles B. Hill	Peter F. Gilroy
1902	Jacob L. Fuller	Peter F. Gilroy	Frederick B. Kellam
1903	A. M. Brown	Clinton Folger	D. A. Spencer
1904	W. H. Lowden	Herbert Folger	Benj. J. Smith
1905	W. H. Lowden	Herbert Folger	Benj. J. Smith
1906	W. H. Lowden	Herbert Folger	Benj. J. Smith

CALIFORNIA KNAPSACK.

1879	Charles Mason Kinne, Editor	W. Macdonald, Associate Editor
1880	Charles Mason Kinne, Editor	
1881	Charles Mason Kinne, Editor	*G. F. Grant, Associate Editor
1882	Charles Mason Kinne, Editor	
1883	Charles Mason Kinne, Editor	
1884	Charles Mason Kinne, Editor	
1885	*George F. Grant, Editor	
1886	*George F. Grant, Editor	
1887	Edwin W. Carpenter, Editor	
1888	*Alexander J. Wetzlar, Editor	

*Deceased.

CALIFORNIA KNAPSACK—Concluded.

1889	*Alexander J. Wetzlar, Editor	
1890	*George F. Grant, Editor	
1891	*George F. Grant, Editor	
1892	*George F. Grant, Editor	
1893	*George F. Grant, Editor	
1894	*George F. Grant, Editor	Edward Niles, Associate Editor
1895	*George F. Grant, Editor	Edward Niles, Associate Editor
1896	*George F. Grant, Editor	Edward Niles, Associate Editor
1897	*George F. Grant, Editor	Edward Niles, Associate Editor
1898	*George F. Grant, Editor	Edward Niles, Associate Editor
1899	*George F. Grant, Editor	Edward Niles, Associate Editor
1900	*George F. Grant, Editor	Edward Niles, Associate Editor
1901	*George F. Grant, Editor	Edward Niles, Associate Editor
1902	*George F. Grant, Editor	Edward Niles, Associate Editor
1903	*George F. Grant, Editor	Edward Niles, Associate Editor
1904	*George F. Grant, Editor	Edward Niles, Associate Editor
1905	*George F. Grant, Editor	Edward Niles, Associate Editor
1906	*George F. Grant, Editor	Edward Niles, Associate Editor
1907	A. W. Thornton and A. C. Thornton	
1908	A. W. Thornton and A. C. Thornton	

DINNER COMMITTEE.

(From first banquet in 1881, George W. Spencer, retiring President, to 1908.)

	*George W. Spencer	*George F. Grant
1907	*George W. Spencer	C. Mason Kinne
1908	C. Mason Kinne	E. C. Morrison

*Deceased.

LIST OF MEMBERS

ACTIVE MEMBERS.

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Dobie, Chas. C.		Yates, Roy O.

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San Francisco Addresses of the Officers of the Fire Underwriters' Association of the Pacific for the year 1909

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